A SHORT HISTORY OF EDUCATION

McINTYRE

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BY

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PREFACE.

For several years, experiments have been made in the Provincial Normal School with the view of discovering a course in Educational History suitable to the needs of a session of four and one-half months. Various current texts have been tried only to be found wanting in the end in certain features considered essential. Finally a lecture course was outlined, and thoroughly tested from session to session until the materials found profitable to the students were obtained. This lecture course is now for the first time placed in book-form to meet the urgent demands of students who confessed their inability to make as much out of the lectures as they felt should be made.

The course makes no pretence whatever at originality of thought. The only merit it has lies in the fact that it has grown out of the necessities of the class, and that it has been tested by several hundred students and found profitable.

In order that the best results should follow the presentation of this course, it is earnestly recommended that the students should make themselves familiar with

the more complete accounts given in Monroe's History of Education, Davidson's Rousseau, Penloche's Pestalozzi, Spencer's Education, Laurie's Pre-Christian Education, The Émile and Leonard and Gertrude.

The blank pages following each chapter are for classroom essays bearing on the work covered and also for recording material collected from sources of reference.

The lecturer is deeply indebted to Dr. G. Stanley Hall, President of Clark University, Worcester, Massachusetts, for permission to add a digest of an article on "Moral Training in the School," by George Edmund Myers, in the *Pedagogical Seminary* of December, 1906, vol. XIII, No. 4.

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HISTORY OF EDUCATION.

EDUCATION AMONG SAVAGES.

(AN EDUCATION OF USE AND WONT.)

Were the upward progress of the race from barbarism to civilization always even, the history of Education would have easily been told. Instead, however, of an even flow of current, we have here and there windings, advancings and retreats. Time and time again we have to record educational ideals and ideas insufficiently grasped, overworked, or not worked enough. Notwithstanding these hindrances, educational progress has been ever upward, a feature every student of educational history should endeavor to appreciate.

Beginning then with man in the simplest of conditions, we shall not be disappointed if we shall find no school, no education as we understand education, and not even a teaching body. In such society, we may, therefore, more readily grasp the general nature, purpose, etc., of education.

However different primitive nations or tribes may be, in general all believe in the presence of some supernatural power dwelling behind the rocks, streams, and other material features of the environment. The Indian

apologizes to the beaver he has slain, and offers a sacrifice of tobacco or some other precious possession to the waterfall he has passed. The life of man in such conditions is occupied in the main in attending to two things, namely, work and worship. Man must secure food, clothing and shelter, but in securing these and other bodily necessities he must guard against incurring the displeasure of the spirits dwelling, or supposed to dwell, in these things.

In securing the necessities of life, the savage understands the value of a simple division of labor. Hence, the hunting, the fishing and the fighting are recognized as duties pertaining to the fathers; while the preparation of the food, the clothing and the shelter constitute the business of the mothers. The games and amusements of savage children accord with the serious work of the elders. The boy learns how to make and use a bow; how to handle a dug-out; and how to read a meaning in the signs and sounds of the wild nature around. The girl imitates her mother after a similar fashion and for a similar end.

Another phase of education is seen in the various dances and ceremonies preceding the hunt, to foray, the sowing of the grain, the harvest time, etc. All of these must be looked upon as the religious exercises of a simple people.

The meaning of these ceremonies was usually made known during the period of adolescence and the method used was the method of initiation. The tribal secrets communicated at such times had to do with such things as the hunting of wild animals and the preparation of the skins. They had also to do with inculcating the virtue of enduring hunger, pain, and thirst without complaint. Furthermore, these ceremonies prepared the young for citizenship, by emphasizing obedience and respect to elders, and faithfulness to the tribe as a whole.

Summing up the education of primitive man, we may say that it consisted largely in knowing *what to do and how to do this.* Such education had merely to do with the present adjustment of the tribe or the individual to the natural and supernatural environments. It, therefore, was wanting in the elements of progress, for the savage possessed no written record of the advance of his race, and no very clear thought of the meaning of the future. Savage knowledge was purely unscientific. The savage knew, it is true, the animal life which supplied him with food, or against which he waged an incessant warfare. He was acquainted with some of the food plants and also with those that were poisonous in the neighborhood. He knew something of the topography of his locality, and something too of the signs of weather and of season. He knew how to prepare the various utensils, implements and weapons needed by his tribe. He appreciated

the value of having a leader and of following him in times of danger. He recognized the importance of a social life bound together by the blood tie. He knew these and many other matters, but he discovered them all by accident or by the impelling forces of food, clothing and shelter.

In advancing from a stage where man was but little conscious of the past, and unable, except in a small way, to picture the future, it is needless to say that much of the progress made was due to mere accident. Geniuses have been present at all stages of the world's history, and the primitive genius who imagined cows, horses and sheep reared under the protecting hand of man, and who succeeded in establishing this idea, aided the race most emphatically in its rise from savagery to a higher phase of culture. As the tribe increased in numbers, and life in consequence became more complex, education would be gradually turned over to a special class of instructors, teachers or priests, and the tie of mere kinship would probably give place to a new and higher social bond.

QUESTIONS.

1. Compare as to purpose, method and results the work of the elementary school of Canada and the primitive school described in this chapter.

2. Write a note on each of the following :—(*a*) The significance of Primitive Education. (*b*) Method of Primitive Education.

In question 2, read Monroe, pages 1 and 10.

3. Describe the education of the Pygmies of the Congo and of the Eskimo in the Barren Lands.

EDUCATION IN THE FAR EAST.

(AN EDUCATION TENDING TO CONSERVE THE PAST.)

The change from a purely savage life to that of an early civilization is attended by a political organization instead of the tribal bond of blood, and also by a written literature, in place of the more than doubtful legends and traditions passed on from father to son.

In China we find conservatism crystallized. As the Chinese are to-day, so were they a thousand years ago. Since the days of Confucius, the Chinese have deemed it a sacrilege to advance beyond the precepts of this sage, and have looked upon any movement away from the prescribed order as entirely "un-Chinese." In spite of this, the Chinese have stumbled upon a few of the greatest discoveries of modern times. In China gunpowder and the use of fire-arms were known when the people of Western Europe gloried in the bow and arrow, the spear and sword. Had China looked to the future instead of trying to repeat the past, the nation to-day might have been far in advance of what it is.

Schools existed in China from time immemorial. The Chinese boy was early given a course of home training consisting of reverence for parents and ancestors, moral precepts, counting, and a careful drill in the Chinese language. At the age of five or six, the boy entered a private elementary school where he

learned to write the Chinese characters, receive some instruction in arithmetic, and some memory work in manners and morals. The higher courses were designed for the children of the nobles and the wealthy classes, and for such of the children of the poor as had shown marked ability in the lower schools. Promotion in every case was decided by written examinations, and the successful students were rewarded by being made government officers with power to direct the conduct of those under them, an extension of the civil service unknown to western nations surely.

Long and severe as were the courses of study, they must have been practically useless in the end, for they contained little or no mathematics, no language excepting ancient Chinese, little history, unless it be a history saturated with the legendary and the fabulous, and a science that can only be characterized as utter nonsense. Looking, however, at the task set, it is little wonder that out of the millions who started the educational race, but few succeeded in winning the prize. It is little wonder, too, that son, father, and even grandfather should be found occasionally toiling at the same examination.

As the Chinese education was entirely literary in character it was necessary that students should be able to read and to write the Chinese characters. Chinese characters represent ideas, and there were something

like 25,000 of these to master. Again, there were several types of writing which students were obliged to know to have even a chance of success. Furthermore, the Chinese verbs have neither voice, mood nor tense, and the nouns neither gender nor number. Add to these obstacles the fact that the language studied was to all intents and purposes a dead language, and some faint conception of the student's task may be conceived.

The higher education of China concerns itself with the memorizing of the nine sacred classics and their many commentaries. Mastery of contents is necessary but the chief work is devoted to the appreciation of the literary structure. The examination test, a test looked after by the Chinese Government, is one of essay-writing, and the student able to dash off the best essay is considered as the only one who is worthy to stand before the greatest of the land. Such a student may be entirely ignorant of the many things a Canadian boy or girl should be ashamed not to know; he does, however, know what right Chinese conduct is, and as an official of the government of China, he is placed where such conduct may be made possible.

China has a system of schools and also a system of written examinations. Schools are found in every village, are supported by private means, and are taught by such students as failed to take the higher Chinese educational degrees.

The method followed is that of exact imitation and memory is the mental faculty usually exercised. Knowing the aim of Chinese education it is not difficult to state the result. The work aimed at is fixed—and dynasty has followed dynasty—but the Chinese character has not changed. Nation after nation in other parts of the world have risen, grown and fallen, but China is still China. Chinese education has not developed the mind as a whole. The Chinese mind is a retentive mind, a mind possessing remarkable powers of concentration, but a mind, nevertheless that must be looked upon as impractical, wanting in initiatory power and adaptability, and likely to remain so until new ideals of education shall replace the present ideals. In China, the individual has a place in society, but this place is fixed by custom, and education is but the process by means of which the individual is fitted into this predetermined place, a conception of education diametrically in opposition to that prevailing among western nations.

QUESTIONS.

1. Discuss the educational value of essay writing in China.

2. Compare the study of the Chinese classics and the more modern study of Latin and Greek.

3. To what extent did Chinese education prepare for Chinese citizenship? How is it with Canadian education?

4. Compare the educational systems of China and Persia. Books of reference to be used—Laurie's Pre-Christian Education and Painter's Educational Essays

HEBREW EDUCATION.

(A RELIGIOUS EDUCATION.)

The ideal instilled into the Hebrew race by the great religious teachers, Amos, Isaiah, Jeremiah and others, was the ideal that personal righteousness was the sacrifice demanded of man by his Maker, and the result of the absorption of this ideal was the advance of the race from a stage of primitive culture to a stage higher than that of China, and equal if not superior in many particulars to that of the Greek and Roman worlds. Hebrew education had for its groundwork the Law, and Hebrew education set out with the supposition that all important truths had been divinely revealed in the Law, and had only to be understood in order to cope with all difficulties. Hence, every letter, word, line and sentence were subjected to the most rigorous examination in order to yield every grain of truth therein contained.

Such an examination of subject-matter would necessarily result in developing a taste for close, critical study; would increase the debating ability of the nation; would encourage a due regard for law, therefore desirable human conduct, and would be a very important means of binding the Hebrew people together.

As text-books were not to be thought of at this early date, the memory was depended upon for the furnishing of texts for discussion, and it would seem that the Hebrew teachers understood in a very fair measure, the value of the psychology of the memory, for they sought to secure the greatest intensity for the impressions by the combined action of several senses. The words were not only heard, they were also spoken and read aloud. Great insistence was placed upon repetition and every device adopted for the purpose of securing the full concentration of the attention.

Hebrew primary education was given by the head of the family in the home. After the destruction of Jerusalem, A.D. 70, schools for elementary education were established in every town and village, and attendance made compulsory. It was, therefore, no wonder that "they searched from Dan to Beersheba, and from Gabath to Antiphorus without discovering an illiterate person."

Hebrew education being religious and moral, great emphasis was placed upon the character and the piety of the teachers, and upon the behavior of the pupils. The Hebrews had no place for quick-tempered, youthful nor unmarried teachers. It may be said that such a system of education was narrow. When we consider that it was this very education, formal and opposed to science as it may have been, that held the people

together and enabled them to maintain a struggle of the greatest severity for upwards of two thousand years, and finally brought them forth conquerors, we cannot but accord it our heartiest admiration.

One lesson Hebrew education has to teach us. It is this—"The most valuable element in all education is moral discipline." Our courses of study may be broad and our methods may be above criticism, but it will avail nothing if the disciplining of the children's morals be omitted. The Greek with his culture, and the Roman with his institutions, have passed away, but the Jew is with us still, as strong and as willing for life's battles as ever.

QUESTIONS.

1. Discuss the place of memory in the early Hebrew school; in the modern school.

2. In what ways did the Hebrew people emphasize moral training?

GREEK EDUCATION.

(AN EDUCATION OF PROGRESS.)

The Greek ideal of education is contained in the word *development.* With the Greeks life meant progress and education, being the means of realizing life, also stood for advance. It was the Greek people who first fully and freely discussed such questions as—the public good, the rights of the individual, etc. It was in Greece where knowledge was first loved for its own sake, and where people first tried to live by reason. Had the Greeks discovered all that made life worth living, our part as teachers would simply be an endeavor to repeat the Greek life of the golden age of Greece, as the Chinese have been attempting to repeat that of the time of Confucius. Love and self-sacrifice, however, were ideals never fully grasped by the Greeks, an omission that weakened all their discussion on man as a moral being. Greek Education, however, stood for a most important thing, namely, a continual and conscious adjustment of the individual to his whole environment.

Greek education is usually divided into two great periods, the *Old* and the *New.* The Old Greek period of history followed the still older period of primitive Greek life, and ended with the commencement of the Age of Pericles. The *New* Greek period commencing with the Age of Pericles, may be considered as falling into two parts, the first part ending with the Macedonian

conquest, and the second, a period when Greek culture was being disseminated over the world.

The period of primitive Greek life, the so-called Homeric times, contained the germs of all the higher Greek development. The education of these days was an education that consisted of a training in practical activities, with no place for instruction of a purely literary character. The training for the needs of life was given in the home, while the training for the public service was secured in the council and on the field of battle. The ideal of education may be summed up in the "man of wisdom and action," both of which qualities the Homeric Greeks attempted to secure in all their young men. Though there were no schools as such, still the primitive Greek world was a highly educated world. So true is this that we are perhaps much more at home with Priam and Hector, Agamemnon and Odysseus, Andromache and Penelope, than we are in the less remote Middle Age. Bravery, kindness, hospitality and loyalty, these and other virtues were admired and also practised by the earliest Greeks.

When we come to speak of the historic period of *Old* Greek education, it is not of one nation under a single government, and with the same institutions and habits of life and of thought. Indeed, it would be difficult to conceive of any two civilized peoples springing from the same stock more unlike than were

the Spartans and the Athenians. The educational system of the former was harsh, brutalizing and soulless, while that of the latter was refining and elevating.

Spartan education pictures the *Old* Greek education in its most pronounced form. The aim was to give to each individual such physical perfection, courage, and habits of obedience that should make of him the ideal soldier, one in whom the individual was forgotten in the citizen. By the *Rhetra* of Lycurgus, a system of regulations by which his countrymen were guided, a child was looked upon as belonging, not to its parents, but to the state. Such a child was to be inspected at birth, and if not strong and healthy, was to be destroyed. At the age of seven such children as were considered worth the rearing, were consigned to the care of public teachers in public barracks. They were allowed only the most scanty fare, and their physical education was of the severest kind. The intellectual education was very meagre, including in addition to reading and writing, only the rudiments of arithmetic and a drill in brevity in the expression of thought. At eighteen, the boy entered a class of cadets where he received a rigid military training for several years. At the age of thirty he became a full-fledged citizen, and the head of a family, yet he continued to reside in the public barracks, eat at the common table, serve as a

soldier in the field and as a teacher of youth, faring the same as the humblest or the noblest in all the comforts and necessities of life. To a very great extent, training came through certain approved exercises in running, leaping, throwing the discus, wrestling, military drill, etc., such exercises were conducted apart from any idea of professionalism, and the elders were always present to approve or to disapprove of the behavior.

Women in Sparta received practically the same kind of education as the men, but for no other purpose than that of training the mothers of future warriors. Such an education, while it no doubt developed the physical nature, surely did little toward the emphasizing of the womanly virtues. Much of the Spartan woman has been praised, it is not too much to say that she was in all probability one whose tongue would likely be less dreaded than her fist. To Spartan education can be attributed little that went to make Greece great. An education meant to make men subject to command, to endure labor, to fight and to conquer, was not an education that could produce sculptors, poets, painters, and leave great ideals as the common heritage of the world.

Save in the simplicity of aim and in the means adopted, the *Old* Greek education of Athens had little in common with that of Sparta. The organization of Athenian education, controlled as it was by a different

conception of life from that which prevailed at Sparta, was radically different from that of the latter. The Athenian citizen guided his life by reason; he was wise and judicious in the performance of his many public duties, yet free in the disposition of his leisure time and in his interpretation of social obligations. He was also strong of body and brave in warfare. Such a citizen could not be produced by an education controlled by a despotic, socialistic regime as at Sparta.

Athens aimed to preserve the family as a means of developing and shaping personality, and upon it placed the burden and the responsibility of education. All schools at Athens were private schools, the state providing only for that portion of education lying between the sixteenth and twentieth years, an education which was mainly physical and which served as a direct preparation for military service.

The training of the Athenian child for the first seven years was wholly in the hands of the family. As at Sparta this training was chiefly physical, since the main concern was to secure a vigorous constitution and a well developed physique. A most interesting phase of child-life, before the regular school life was undertaken, is seen in the fact that Greek literature mentions and describes a very extensive list of children's games, including practically all that we have to-day that are really educative.

School life began about the seventh year and continued for eight or nine years. In two particulars Athenian education differed widely from modern practice. The Athenian boy attended two distinct types of school. Secondly, the character of the work done in these schools was different from the most of modern schools. Athenian education had for its aim individual worth, that is, perfection of body in strength and beauty, and perfection of mind in wisdom, fortitude, temperance and justice, an aim which was never separated from that of public usefulness.

Such education naturally fell into two parts:— Gymnastics for the body and music or literary education for the soul. The former of these was taught in private schools and the latter in out of the way nooks, in temples and in public buildings. During all this period the Greek boy was in charge of a *pedagogue*, a faithful slave or servant, who was intrusted with the moral oversight and general care of his charge.

At the age of sixteen the boy, being freed from the care of the pedagogue, discontinued all literary or musical study and replaced the training of the private gymnasium by that of the state gymnasium where he associated most fully with the youth of his own age and with the Athenian adults. At the age of eighteen he reached his majority, became an independent citizen and had his name enrolled in the *demos* to which he

belonged. He now cut his long hair, put on the dark garb of a citizen and was presented to the assembled people and made to take the oath of loyalty to the state. He was now a citizen novice with a noviate of two hard years of military service before him. The first of these he spent at Athens drilling and acquiring a knowledge of military tactics. At the close of this year he was examined, and if his examination had been successfully passed, he was drafted off to the frontier to act as a militia man. At the end of the second year he underwent his "*manhood*" examination, which entitled him to full citizen's rank. As a citizen he entered upon his university education which ended only with his death.

Such was the old education of Athens, an education which produced Miltiades, Themistocles and Pericles, and made Marathon, Salamis and Plataea possible. It was an education for civic manhood, and it was gloriously successful.

At the present time, when so much is being made of the constructive side of education, another phase of Greek method is of special importance. Greek education was first a *doing*; only in the second place was it a *learning* process, the Greeks believing that if the work is done and well done the reason why it should be done in this or that way will surely follow.

The *old* Greek education resulted during the fifth century before Christ in a remarkable period of national

progress which has never been surpassed in history. The culmination of this period was the Age of Pericles. During and immediately preceding this period the highest products of Greek civilization were attained. Think of politics in the hands of a Themistocles and a Pericles; art in the hands of Phidias; history under Herodotus, and the drama in the hands of Sophocles! The *old* education laid the foundation of all this glory, but the *old* education was not capable of meeting all the demands of the day and was entirely inadequate to cope with the needs of the future. Athens, no longer an obscure and conservative place, was now situated on the great high way of the world's trade, a gathering place, as it were, for all the new ideas of the times. People demanded an education that would fit the individual for taking full advantage of the many opportunities offered in the way of personal achievement. People likewise demanded greater freedom in thought and in action to correspond with the growth of freedom in the political and commercial spheres. These results were remedied in a measure by the Sophists, Greek teachers who saw the weakness of the *old* Athenian education, and offered the youth of Athens such a training as would equip them for sharing to the fullest extent in the political and social life of the day.

"*Man is the measure of all things*," was the favorite doctrine of these teachers, meaning thereby that the

individual was the one to determine his ends in life, his standard of conduct in securing these ends, the extent of service to be rendered the state, and the extent of his sacrifice of energy, time, and wealth for the common good. The Sophists were students of affairs; men who had travelled widely for their day; men who had fairly up to-date ideas concerning political life and social institutions. Sometimes the work of the teacher ended by giving mere information; sometimes set speeches were provided on numbers of timely topics; and sometimes attention was given to the perfection of the debating power of the students. The Sophists, it is said, taught young men to "think, speak, and act"; the Sophists, in a word, rendered general culture universal, surely no small service to the state. The presence of such teachers would naturally interfere with the old order of things, and especially with the period from the sixteenth to the eighteenth years. Henceforward, this period was devoted to a purely intellectual training, and much attention was placed upon the *character of the instruction given.*

Socrates, the "arch-sophist," as he has been termed, took as his starting point the dictum of the Sophists. If this dictum be true, he argued, then must man's first duty be to *know himself.* In other words, Socrates taught that the new moral standard, the standard which was to determine all the aims of life, was to be found within

the consciousness of the individual, but never as *mere opinion*. Socrates held that *real* knowledge possessed *universal validity*, hence if conduct be guided by ideas possessing universal validity, instead of by mere opinion, then and then only is it possible for one to live the *virtuous* life. This being so, the aim of education is to give the individual knowledge by developing in him the power of thought, such a power being developed through a process of *dialectics* or logical discussion.

The mode of instruction adopted by Socrates was wholly different from the pedantry and boastful ostentation of the Sophists; was altogether unconstrained, conversational, popular, starting from objects lying nearest at hand and most insignificant, and deriving the necessary proofs and illustrations from the most common matters of the every-day life; in fact, Socrates was reproached by his contemporaries for speaking ever only of drudges, smiths, cobblers and tanners. It would seem then that Socrates would be found at the market, in the gymnasia, in the workshops, busy early and late, talking with youth, with young men and with old men, on the proper aim and business of life, convincing them of their ignorance and awakening in them the slumbering desire after knowledge.

Philosophy before the time of Socrates had been to all intents and purposes an investigation of nature. But in Socrates, the human mind for the first time,

turned in upon itself, upon its own being, and that too by conceiving itself as active, moral spirit. Self-knowledge appeared to Socrates the only worthy object of man's activity and the starting point of all true philosophy. Knowledge of every other kind, he pronounced as worthless, and he was wont to boast of his ignorance, and to declare that he excelled other men in wisdom only because he was conscious of his own ignorance. The great fundamental thought of the Sophistic philosophy, namely, that every moral act must be a conscious act, was also his. But while the Sophists made it their object to confuse and to break up all stable convictions and to make all objective standards impossible, Socrates had recognized *thinking* as the activity of the universal, and free objective thought as the measure of all things. Instead, therefore, of referring moral duties and all moral action to the fancy and the caprice of the individual, Socrates reduced all morality to accurate knowledge, and it was this idea of knowledge that led him to seek, by the process of thought, an intelligible objective ground.

The Socratic method had both a negative and a positive side. In the former the philosopher assumes the attitude of ignorance, and would apparently let himself be instructed by those with whom he converses, but through the questions which he puts, the unexpected consequences which he deduces, and the contradictions

in which he involves the opposite party, he soon leads them to see that their supposed knowledge is only a source of confusion and contradiction. In the embarrassment which follows, and in seeing that they do not know what they supposed they knew, this supposed knowledge completes its own destruction, and the individual learns to distrust his previous opinions and firmly held notions. On the positive side, the philosopher starting from some individual, concrete case, and seizing hold of the most common notions concerning it, knew how to remove by his comparisons that which was individual, and by thus separating the accidental from the essential, could bring a universal truth and a universal characteristic to consciousness. On this account we might characterize the Socratic method as the art by which, from a certain sum of homogenous and individual phenomena, the universal principle lying at this base, may be inductively found.

The immediate influence of Socrates was two-fold. There was great stress placed upon *knowledge*, but, unfortunately, most of the people failed to make fine distinctions as to the validity of knowledge. In the second place, Socrates held that little mental improvement came from the direct impartation of knowledge. It was, therefore, necessary to create minds capable of reaching truth for themselves. To Socrates' immediate followers, a mastery of his method

became the important thing, the result being that Greece literally became a nation of talkers, and not a nation where great deeds were done. At the same time, the acuteness and versatility of the Greek mind, features unequalled by any other peoples, were due, in a large measure to the influence of this sage.

Plato was one of Socrates' pupils. After sitting for ten years at the feet of this philosopher, Plato travelled abroad, and on his return expounded in the gardens of *Academia*, the great principles of his master, with such improvements as his own genius had added.

In his "Republic" and in his "Laws," he gives us his theory of education. He lays down rules for distinguishing good from bad teachers, and urges the state to select only the best. Though he believed in physical training, he very greatly modified the Spartan ideas of exercise and of diet, and he urged the value of music in its modern sense. In intellectual culture he would teach arithmetic, geometry and astronomy, and to such as would attain to eminence, philosophy. But while the influence of Plato upon educational theory has been undoubtedly great, his influence upon school practice has been comparatively slight.

The problem discussed by Plato was the same as that which Socrates and the Sophists had endeavored to solve. This problem was the problem of harmonizing the individual and the state. In developing this, Plato

recognized the importance of universal truth, or to use his favorite term, in recognizing the importance of *ideas*, the intelligence through which men were bound together by nature.

In the matter of method, Plato elaborated upon the *dialectic* of Socrates, but he considered the acquisition of this power as beyond the reach of the mass of men. In his ideal republic, therefore, philosophers were to be the rulers, because philosophers alone are acquainted with the "*highest good*." Philosophers alone can determine that* "disposition of men and things which will result in the moral advancement and the ultimate perfection of the race." In his analysis of the human mind, Plato discovered an intellect whose virtue is *prudence;* passions, whose virtue is *fortitude;* and desires, whose virtue is *temperance*. As the state is but the individual enlarged, the state may also be divided into three classes: the philosophers devoted to the pursuit of knowledge; the military class, devoted to warfare; and the producing class, devoted to trades, etc. In the case of the individual, if the intellect were to restrain the passions, rule the desires and thereby control action, then would *justice* be maintained in the individual's life. In the case of the state, were the philosophers to rule, the military class to guard under the direction of the philosophers, and the artizan class

*Monroe's History of Education, page 65.

to obey and support the superior classes, then may *justice* be attained in the state. By a system of education it would be possible to discover the attainments of each individual and to develop them for the particular class which nature intended him to occupy. Such in a few words is Plato's ideal scheme of education; a scheme providing for each individual the greatest freedom in the sphere of life for which his qualifications had prepared him, and a sphere, too, where he may be of the greatest service to his fellows.

Aristotle, the *master of those who know;* the man who by common consent bears the reputation of being the *best educated man of any age* was one of Plato's disciples. After an absence of some years, during four of which he was the tutor of Alexander the Great, he returned to Athens and established his *Lyceum.* Here for thirteen years he taught two classes daily, walking with his pupils in the groves. In the morning his lectures were to the more advanced of his pupils and were devoted to dialectics, to physical science, and to the more profound principles of philosophy. His afternoon walks and talks were with a larger company, and were devoted to the discussion of political, ethical and rhetorical questions.

With Plato, philosophy had been national in both its form and content, but with Aristotle it lost this peculiarity and became universal in scope and in meaning.

Aristotle embraced with equal interest the facts of nature, of history and of the inner life of man. Aristotle ever tends toward the individual; he must ever have a fact given in order to develop his thought upon it; it is always the empirical and the actual which solicits and guides his speculation; his whole philosophy is a discription of the facts given, and only merits the name of a philosophy because it comprehends the empirical in its totality and synthesis, and because it has carried out its induction to the fullest extent. Because he is the absolute empiricist, he is also the truest philosopher. According to this it is clear that the method of Aristotle must be different from that of Plato. Aristotle pursues for the most part an analytic course, that is, he goes backward from the concrete to its ultimate ground. While Plato would take his standpoint on the idea in order to explain that which is given and empirical. Aristotle, on the other hand, would start with what is given in order to find the idea in it. His method is hence *induction* and his philosophy has the character and worth of a computation of probabilities, while his mode of exposition assumes not unfrequently the form of a hesitating deliberation.

Aristotle was the first great scientist. Through the practical formulation of the induction method and the application of thought to new phases of reality, Aristotle became the author of physics, natural history,

physiology and mechanics. Aristotle was also a great systemalist, such words as *end*, *final cause*, *matter*, *form*, *principle* and others being all of his coinage.

Aristotle's immediate influence on Greek life was not great, but his writings were carried to Asia and subsequently to Northern Africa and to Europe. As Aristotle through his philosophy summed up the intellectual life of the past, and through his method laid the basis for all the intellectual life of the future, so through his great pupil, Alexander the Great, he was the means of spreading the culture of Greece throughout the then known world. Greek schools, Greek teachers, Greek institutions of every type were soon found in every great city of the East, and after the Roman conquest Greek culture was appropriated and became in the end the common culture of the modern world.

QUESTIONS.

1. Give an account of the contributions of the Sophists, Socrates, Plato and Aristotle to Greek educational reform.

2. Describe the education of Homeric times.

3. Read the "Significance of Greek Education," Monroe, page 52.

4. Criticize Plato's Republic.

ROMAN EDUCATION.

(A UTILITARIAN EDUCATION.)

About the year 753 B.C. a number of shepherds, driven by volcanic disturbances from their Alban hills, founded a new city on the Tiber, the city of Rome. After a period of four hundred years a few neighboring cities had been absorbed, and the memorable struggle between Patricians and Plebeians had ended in the complete victory of the commoners. With the completion of this struggle Rome ceased to be an aristocracy and became a republic. She was still an obscure state with no learning, nor splendor, but with an unconquerable spirit, a love of freedom and an energy capable of sustaining any scheme of conquest entered upon. In about four hundred years more the world had no power but Rome. Her eagles ranged from Britain to the Nile and the Euphrates; her military highways threaded all her lands; and her armies, everywhere present, saw that peace and good order were enforced. The early Romans had acquired by long years of frugal living, and of self denial for the common good, the strength that enabled them to conquer the world. But with ever-increasing conquest came wealth and power and a magnificence and luxury that sapped the nation's life and exposed the country to the invading hordes living outside the boundaries of the empire.

In passing then from Athens to Rome, one passes from poetry to prose; from a people seeking to make the present beautiful and to enjoy it nobly and rationally, to a people disdaining present happiness for future good. Roman genius was ever practical, and it is to the Roman people we must go to find the means or institutions for the realization of the more practical Greek ideals. It was Rome that raised the Greek conception of a confederate government to that of a great empire. It was Rome, too, that took hold of the Greek ideal of law and made of it a system of legal principles which serve to this day as the basis of all national and international law. It was Rome, moreover, that accepted the religion of the despised Nazarene, and made of it the religion of the enlightened world.

The Roman father had the right of executing all law upon his children. He was also the priest of his own household. As a citizen of the state he had also certain political duties relating to the making of contracts, property, defence, etc. All these duties demanded an adequate training throughout the years of boyhood. A portion of this was provided by the home, the balance was furnished by the school. The virtues aimed at in this training were all of a practical character. The idea of manhood was illustrated by well-known Romans, either historical or actually living, and the youth of Rome were expected to emulate these in prudence,

dignity, bravery, etc. The tendency of Greek life was to lose sight of the importance of the home. The home of the Roman was the centre from which everything good and great was to emanate. The father was responsible for the physical and moral training of his sons. The mother was the companion of her husband socially; her throne was the home circle and her children were her greatest jewels.

When the boys were somewhat grown they became their father's comrades, the father either educating them himself, or seeing that their education was properly attended to. Such a relation was good for the Roman boy. Such a responsibility would also be a good thing for the Roman father, and no doubt it had the result of emphasizing the rugged character which was taught to attach to the old Roman people in general. The Romans had no idea of an education by the state. In their earlier years the children were taught at home, their mother teaching them to reverence the gods, reverence their elders and to obey. The father taught his boys reading, writing and a little arithmetic. Being his constant companions he also educated them in public business. Home influence was supplemented by that of concrete types of ideal Roman manhood, a study of biography which appears to have borne excellent fruit. The Roman boy was to become sedate, reverential, etc., by imitating his father and the old Roman heroes who found their way into Roman legends and Roman history.

Roman education was divided into two periods. The first period covered the years when the ideals and practices were thoroughly Roman in their character. The second period dates from the time that Roman education began to take on less or more of a Greek cultural caste. With the conquest of the Greek cities of Southern Italy about 270 B.C., and especially with the conquest of Greece itself a century later, Greek learning was introduced at Rome; Greek teachers were imported; schools were multiplied and the range of studies greatly increased.

Shortly before the beginning of the Christian era the old form of government fell. There was no longer a sufficiency of the old Roman virtue available to render a republican government possible, and the nation became the Roman Empire, ruled by the Caesars. The first two centuries of the Empire's existence was the time of Rome's greatest military power and splendor, and of the greatness of her literature and architecture. But moral decay was at work at the foundation of all this magnificence, and the Empire, a bankrupt in manhood, fell to the ground.

During the Imperial period, that is from about 100 B.C. to 200 A.D., Rome became completely Hellenized so far as the adoption of the Greek culture was concerned. Notwithstanding this, Rome never surrendered any of her distinctive characteristics, and never acquired

the distinctive features of the Greeks, namely, versatility and originality. A prominent feature of the Imperial period was the place given oratory, a matter that was never of any very great moment to the Greeks. The great warriors were also great orators, and the orator summed up in himself the functions at present performed by bar, pulpit and press. To become an orator was, therefore, the ambition of every Roman, and to see her son an orator was the dream of every Roman matron.

One teacher of the day was Quintilian, the author of "Institutes of Oratory," the only practical work on education given to us by a Roman. In this work Quintilian shows the value of public school education over private instruction; he condemns the use of physical force, remarkable ground to take at a time when one's proximity to a Roman school could always be ascertained by the cries of children undergoing the pedagogy of the rod; he emphasizes the value of making subjects interesting, and indicates the gain that would follow a wise selection of teachers.

QUESTIONS.

1. Compare and contrast Roman and Athenian educational systems.

2. To what extent did biography play a part in Roman education? To what extent does it play a part in Canadian Elementary education?

3. Criticize Seneca as a teacher.

EDUCATION IN THE MIDDLE AGE.

(AN EDUCATION OF CHRISTIAN TRAINING.)

During the long centuries of the Middle Age, in other words, from the decline of the Roman Empire to the middle of the fifteenth century, the light of learning glimmered only by fits and starts. But there was ever the pillar of fire before the advancing host and this fire was Christianity.

It was natural at one time for the Jew to place himself above the Gentile; the Greek himself above the Barbarian. The Roman citizen emphasized the same idea when he placed his hand on his heart and said:—"I am a Roman citizen." There was yet no recognition of a common humanity, a humanity that would help to remove the shackles of national prejudices and national limitations. With the advent of the Christ there came a new era in history. New truths were thrown into the world; truths so far-reaching that the experiences of nearly two thousand years have not exhausted their force, nor discovered all their meaning. In teaching the "fatherhood of God and the brotherhood of man," Christianity has helped to sweep away all distinctions of caste and class; has elevated marriage into a divine rite and has caused children to be looked upon as the gifts of God.

But Christianity did not secure a footing in Europe without a struggle, and a struggle, too, that will appear

all the more remarkable as we view it from the vantage ground of the twentieth century. The wonder is, not that the Middle Age was dark, but that any ray of light had been allowed to live. It will be remembered that the eagles of Rome had spread their wings over the civilized and much of the barbarian worlds. Wherever the standards were planted, Roman institutions, the Latin tongue, and too often, the vices of a decaying Roman civilization were introduced. The Roman of this period was a proud creature, wanting in natural affection and caring little for anything outside of a love of Roman supremacy and the gratification of his own selfish ends. Recognizing no law of pity, nor compassion, what wonder is it that he found pleasure in looking at gladiatorial contests where men fought each other and where wild beasts were turned loose in the arena to devour men, women and helpless children. If such a person can be pictured and such scenes imagined, we may understand in a measure, the influence which emanated from Rome during the four or five hundred years of her slow, leprous death. If we can picture such a state of affairs we may furthermore understand something of the tremendous obstacles Christianity and the Christian education had to contend against during the earlier years of the struggle. But this was not all, nor was it perhaps the greatest obstacle in the path of progress. No sooner had Christianity gained an

uncertain hold of the southern provinces than there poured in from the north and the east a vast horde of heathen conquerors, who not only destroyed much that had been done but also introduced their own heathen culture. In spite of all this, Christianity prevailed, the seed fell upon good ground for the Teutonic races possessed the very features which brought them into sympathy with the new religion. These invaders recognized in a high degree the worth of the individual and the value of personal freedom. They possessed a deep religious nature and a great reverence for and love of truth. In addition to these qualities they possessed rare physical and intellectual vigor; qualities which enabled them to take up the problem of the world's development at a point where Rome, with strength exhausted, had left it.

By the end of the second century, the old order of things was slowly going into decay before the uplifting power of Christianity. With the Christian church came the Christian schools, and for the first time in history the great moral force conserved in the Hebrew race for hundreds of years, was poured into the current of the world's life. Human equality and purity of life, both unknown to the Roman, but developed in the Jew through fifty generations, were now sent into the world with all the added spiritual force of Christianity. The poor and the lowly, women, children and slaves soon felt the power of

the new religion. Christian schools multiplied, and their chief concern was to give religious instruction to the children. Children were made acquainted with the narratives relating to Abraham, Jacob, Joseph, Samuel, and the Holy Child. The history of the patriarchs, apostles and holy men were the nursery tales with which parents sought to mould the minds of the young. As the child grew it was the sacred duty of the parents to exercise it daily in the recital of select passages of scripture, relating to the doctrines and the duties of religion. The Bible was the entertainment of the fire-side, and the child's first and only text-book, while sacred songs were the only songs permitted to be heard. The heroine of *Quo vadis* is the type described.

Such was the character of *early Christian education.* Narrow, but did it not produce an excellent type of character, and is character not the feature of greatest moment in any educational system? Is character, the character that will stand firmly when disasters and dangers beset, not the feature faithful parents are most anxious to see in their children? Such an education as we have described, was an education in Christian discipline.

The simple schools of the earlier Christian times could not always supply the educational needs. *Catechumenal* and *catechetical* schools sprang up naturally to prepare candidates in the doctrines of the Church and

also for Christian baptism. In apostolic days, new converts were received after a very brief course of instruction and upon a very simple confession of their faith. As Christianity spread, and converts from among the Jews and the heathen became more numerous, it was found advisable for the sake of unity, purity and intelligence in the church, to give candidates a more extended course of instruction. This instruction, which extended from a few months to a few years, was given by special church officers, and covered the fundamental truths and doctrines of Christianity.

The schools above referred to differed in the character of the work taken. The former were more elementary, were more for the common people anxious to unite with the Church, and were officered by men possessing a good deal of common sense, and enough learning to be able to make clear the truth to simple minds. In the catechetical schools the teachers were sufficiently versed in Christian philosophy and the various philosophies of the day to discuss religious questions with even the cultured heathen desirous of understanding or embracing the new creed. The catechetical schools were somewhat of the character of our theological seminaries, the catechetical school at Alexandria standing to the Alexandrian University in much the same relation as denominational colleges sometimes stand to the modern university. Alexandria, indeed, was the birthplace of what may be termed *scientific* Christianity.

One great hindrance to the cause of education in the Middle Age was the fact that all the learning of the past was locked up in the Latin, and this was so interwoven with paganism that the Church feared the result on the popular mind, still holding more or less to its abandoned faith. This opposition of the Church, this conviction that Christianity was foreign to Roman culture, and the absorption of the intellectual interests in theological questions, contributed to destroy much of what had remained of sound scholarship in the last years of the Roman Empire. The task of the Church in the Middle Age was indeed, not so much to keep learning alive as it was to moralize the savage races who held Europe at their mercy. Even if the purest of Latin could have been instilled into the Northern nations the result would have been trifling in comparison to a disciplining of these nations in manners and in morals.

As time advanced and less danger of a return to paganism ensued, the Church began to feel the need of educating as well as humanizing society and looked to Latin for aid. Latin seemed necessary for ecclesiastical purposes, for the interpretation of the Fathers, and for the establishment of a common means of communication among a polyglot people. Grammar had, therefore, to be taught, and with the introduction of grammar came the introduction of some of the Latin authors. Hence,

writers formerly condemned, were now adopted as a sort of necessary evil, but to render these as innocuous as possible, the scribes sought to make them edifying often at the sacrifice of their original meanings.

It may, perhaps, give us a better insight into the education and the schools of the earlier part of the Middle Age were we to examine the course of studies then in vogue. This course was divided into two parts, the *trivium* and the *quadrivium*. The former, or theoretical division, included grammar, rhetoric and logic, and the latter, or practical division, music, astronomy, arithmetic and geometry. We shall err very greatly, however, if we should suppose that any of these subjects implied anything like what they do to-day, or that any considerable part of the common people came under their influence.

It is necessary now to note a peculiar tendency of the Christian Church, and therefore of Christian education. This was a tendency to disdain the present world in the interest of the world to come; and this tendency exerted a very great influence for upwards of ten centuries.

Traces of the *ascetic* tendency, as it was named, were seen in the early Christian Church, but it was not until late in the fourth century that these culminated in asceticism as an important educative force. Whatever of good this tendency possessed, it failed to grasp the

truth that human life is an organic whole and that eternal life is but a continuation of temporal life.

The ascetic tendency had several effects. Religious doctrines and interests monopolized everything. Science was set aside for theology; history for legends of the saints; and the principle of authority assumed control of things secular and things sacred. Under the influence of asceticism, *monasticism* became a directive force of very great value.

In the early days of Christianity society was divided into two classes—pagan and Christian. When the latter of these absorbed the former, it was necessary to distinguish those who directed the spiritual welfare of the people and those who simply concerned themselves in the common activities of life. As a result, clergy and laity were separated, while a part of the clergy wishing to secure themselves entirely from the common interests of life, sought the friendly shelter of the walls of the cloisters, where the monastic ideals of poverty, chastity, and obedience could be the better practised. As idleness was not a desirable condition of mind or body, rules relating to mental and bodily exercise were instituted. It was, therefore, expected that the monks should engage in manual labor for the space of seven or more hours, and in literary work for two or three hours daily. From these provisions much of the most valuable monastic contributions to the general welfare came.

Manual employment, devoted as it was to all the activities of the farm, was the means of placing the monastery in the position of an agricultural college or experimental farm. Literary work preserved a love for letters, and made the monastery the sole teaching centre of the country. Men of a reflective turn of mind found here a congenial atmosphere, while those broken in body and in mind secured a comfortable asylum. Finally, the monastic ideals with their corresponding virtues emphasized the dignity of charity and humility, and taught a rude and semi-civilized people the meaning of a higher civilization.

Besides the convent or monastic schools there were two other classes of schools which owed their origin to the Church. These were the *cathedral* and the *parochial* schools. The priests connected with each cathedral church were organized into a monastic brotherhood, one of whose chief duties it was to establish and conduct schools. These were intended primarily for the instruction of candidates for the priesthood, but they were at the same time accessible to other students. The instruction given was similar to that given in the monastic schools with the addition of placing extra stress upon religious subjects.

The parochial schools were established in the separate parishes and were placed under the supervision of the priests. These schools were intended to help the youth

of the parish in the understanding of Christian doctrine, and to prepare them also to take a more acceptable part in the public worship. Ability to repeat and chant the *Credo*, the *Pater Noster*, *Ave Maria*, and a few Latin hymns, without much idea of their signification was, in too many instances, about the extent of the instruction.

In the sixth and the seventh centuries, while learning was at its lowest ebb on the Continent, the *Irish schools* flourished and students from all ranks of society went by hundreds from England to attend them. A twelve years' course in Irish language and literature was given and the teaching body was not entirely drawn from the ranks of the clergy.

The first decided move toward a higher intellectual education was made by *Charlemagne* about the close of the eighth century. Charlemagne's work was concerned with bringing about the union of the Roman and the Teuton and thereby transferring to the latter the task of building the superstructure of a modern society upon the foundation of the former. As the monasteries were the only educational machinery of the times, the monasteries were naturally used in the great Emperor's educational reforms.

In a tour through Italy, Charlemagne fell in with Alcuin, the cultured head of a school established by the Archbishop of York. This able man was prevailed

upon to make his home at the court of Charlemagne, who placed himself and his household under the tuition of the Englishman. The Emperor's example became more and more contagious; the cathedral schools were reopened and improved; the Roman literature was again brought to the light and the manuscripts paragraphed. Charlemagne, in an address to the priesthood, insisted upon a higher standard of education among the clergy, and also upon better instruction in the parish schools. Had the successors of the Emperor set equally good examples, there can be little doubt that the permanent revival of learning would not have been left to the fifteenth century. After the death of Charlemagne, the cause of education was abandoned in spite of the efforts of a few heroic men, and the old order of ignorance and of inefficiency was resumed.

The next patron of learning was *Alfred the Great* (871-901). In the British Isles the cloistral schools of Ireland had been far in advance of most of those on the continent, but the masses were still illiterate. The civil disorders which preceded Alfred's reign, together with the Danish invasions and the consequent extinction of the convent schools and libraries both in Ireland and in England, had induced a state of ignorance and of wretchedness never before experienced in these countries.

Up to this time there had been but few books written in the vulgar tongue of England, but the king, wisely

judging that his people needed books in a language they could understand, translated with his own hand the works of *Bæthius* and others. Many were encouraged to engage in the same useful task. The monastic schools were reorganized and every effort made to place them in the charge of capable teachers

Perhaps no single person exercised greater influence than Alfred the Great, in moulding the educational system of England. But here, as on the Continent, this revival of learning was but transient, and did not long survive its noble patron.

Among the other lights which gleamed in the latter half of the Middle Age, mention may be made of a movement known as *secular education*. This assumed two directions, the one, "Knightly education," was an offspring of chivalry; the other, "Burgher education," was an outgrowth of the commercial necessities of the day. These secular tendencies were in part a reaction or a protest against the one-sided religious character of the Church schools, and in part a natural product of peculiar social conditions.

During the greater part of the Middle Age the Church had exercised dominion over the military and the producing classes. With the Crusades a change in the social relations of Europe commenced. The sphere of human knowledge was much enlarged. Foreign lands and new customs were introduced into the circle of

popular thought. The knightly class was brought into greater prominence, was largely increased in numbers and ennobled in its aim. Commerce received an impetus which reacted on the burgher class and extended the power and the influence of the cities. The subordinate classes attained to a feeling of independence. They wished to emancipate themselves in some measure from church tutelage, and this naturally led to the introduction of schools suited to the new order of things, *i.e.*, schools, where more attention would be given to reading, writing, arithmetic, geography, etc., and less to purely religious studies.

Knightly education stood in bold contrast to that of the Church, by attaching importance to those things which the Church either neglected or condemned, viz., physical culture, polished manners, a love of glory, and a better conception of the worth of woman. The native tongue was not neglected, and nature was not made to stand any longer in unnatural opposition to spiritual interests. In a word, chivalry did for the lay-life the same kind of service that monasticism did for the religious life. Chivalry ennobled service by keeping the ideal of obedience to those in authority constantly before the minds of an uncultured people.

The education of a knight included that of the page and that of the squire. The page spent that portion of his youth between the ages of seven and fourteen at the

castle of a friendly nobleman. During this period he learned how to wait on the ladies, and how to wait at the table, and these duties he continued to perform as a squire; he also rendered a great variety of personal services to his lord, an education well emphasized in the "White Company" by Conan Doyle.

The page and the squire were supposed to learn the fundamentals of religion, war and love. The knightly service as a whole was a religious service. The elements of love were supposed to be acquired through the service rendered the ladies, and also through the teaching of the minstrels. The tournament was the principal preparation for war, and for this the young man was trained from childhood to ride a horse, handle a sword, and in fact to do everything of a military character. As the period of knighthood drew near the religious side of chivalry was duly emphasized. On the whole, this training, when "knighthood was in flower" was of a highly educative character, developing in the individual an ability to endure hardship, hunger and fatigue, and disposing him to look more sympathetically upon those not so favorably nourished.

During the twelfth and thirteenth centuries there sprang up a new scholastic philosophy, the essence of which lay in subtle quibblings, and in the artful fence of logic. Amazing fabrics were woven out of such fine threads as: "Will one grain make a pile?" "How

many angels could stand on the point of a needle?" etc. Yet, though some of the questions discussed seem to us to be utterly foolish, though their solutions added nothing to the progress of the day, they, nevertheless, awakened keen intellectual activity and prepared the way for the coming revival of learning.

The attitude of the intellectual life of the first five hundred years of the Middle Age was an unquestioning obedience to authority. By the eleventh century a new position had to be taken. Heretical ideas had filtered in from the East. These had to be met by argument as well as by force, and the purpose of scholasticism was to aid faith by reason, and strengthen the religious life of the Church by the development of intellectual power.

Church doctrines had been formulated for many generations. It was necessary now to analyze, define and systematize these doctrines. Scholasticism aimed at developing power to formulate beliefs into logical systems, so that these beliefs could not be set aside by any arguments which might be brought to bear against them. To secure this power it was necessary to train for it, and the child was now introduced to grammar as formal as would be studied by the adults of to-day.

The *schoolmen*, it is true, never stopped to examine into the material dealt with in order to ascertain whether or not it was valid, nor whether sufficient data had been collected. Still this keen debating had one important

result. It stimulated intellectual interests and added greatly to the number of those whom the world called the *learned.*

The term "*University*," as used in the Middle Age and even at a later date, was very different from the sense in which it is used to-day. The university usually consisted of a company of learned men who gave lectures to crowds of students on the various topics on the courses of studies. Often there was no building, nor anything else to mark the existence of such an institution save the faculty and the students, and it was no uncommon thing for a university to pick up bag and baggage and move to another city or town where the environment was more attractive. These early universities recognized four faculties, viz., theology, law, medicine and philosophy or arts. Politically and in other respects these institutions were looked upon as the centres of freedom during the years intervening between the close of the Middle Age and the dawn of the Reformation. However meagre and narrow the intellectual life of the universities was, it was in them, at any rate, that the spirit of inquiry was kept alive.

One other feature playing a very important place in later education, may now be mentioned. While Latin was the subject receiving the maximum of attention for the time, the day was coming when the mother-

tongue of every country would have to be considered, and given a prominent place on the school programmes. To prepare for this it was necessary to polish and refine the various vulgar tongues so as to make them proper vehicles of expression. Besides writing one of the few master-pieces of all time, besides preserving for us in his imperishable pages both the soul and the form of the mediæval world, Dante created the Italian tongue, and wrote in it his divine epic. Again, in the latter part of the same century, Chaucer (1340-1400), rendered the same great service to his mother-tongue and created out of a barbarous medley of Norman-French and Anglo-Saxon, the English language, so that when the English revival of learning came at last, its poets and writers found this magnificent instrument ready at hand.

QUESTIONS.

1. What obstacles had early Christianity to contend against? With what success?

2. In what way were the Tutonic people worthy to take up the world's advancement where Rome had left it?

3. What contributions to educational and to social reform were made by *monasticism* and by *chivalry*?

4. What is meant by the "Age of the Schoolmen"? Account for the existence of this school of philosophy.

5. State in a few words the place of the Middle Age in the advancement of the world.

THE PERIOD OF THE RENASCENCE.

(A RESTORATION OF NATURE.)

Day was breaking on the world. Light, hope and freedom were beginning to pierce the clouds that hung so thickly over the prostrate Middle Age. Kindled with new life, the nations of the North gave birth to a progeny of heroes, and the stormy glories of the sixteenth century rose on an awakening Europe and a modern world.

Light had slowly been increasing by fits and starts during the later centuries of the Middle Age, and the past, with all its darkness, may have been the necessary preparation for the brighter days of the future. It must not be understood that the Middle Age had done nothing for human progress. The world had taken a long stride beyond paganism. The ideas of the peculiar worth and dignity of the human soul, and of man's accountability for his fellowman's spiritual welfare, were deep in the heart and in the conscience of the mediæval world.

The human mind, awakening from its dogmatic sleep, began to look about and to inquire, and the result were three very important discoveries and one important invention. Columbus had made known a new continent; Copernicus had practically created a new heaven and a new earth; and the classical literatures

of Greece and of Rome were re-discovered. These discoveries, together with the fact that the invention of the printing press made books the common possession of the people, broke up the Middle Age and turned men's minds into entirely new channels.

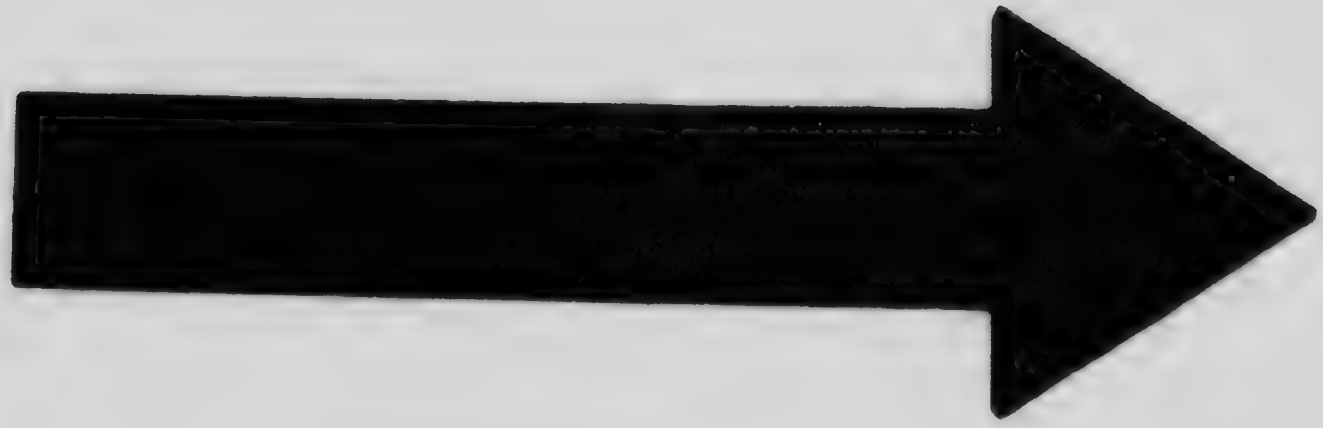
In the course of time the new movement resulted in two great historic events, viz., the *Renascence*, or *the restoration of nature*, and the *Reformation*, or *the restoration of reason;* both of which called for an education quite different from that of the Middle Age, an education which made the observation and the sifting of facts, and the drawing of proper conclusions from these a leading feature.

But the transition from the *old* to the *new* was by no means as rapid and as marked as might have been expected. In departing from any settled groove of thought, the final break is usually made by some one individual, the "masterless man" of Kipling's splendid allegory, the man who sees with his own eyes, and with an instinct and a genius for truth, escapes from the routine in which his fellows flounder. Such a man usually pays dearly for his boldness, for the pain associated with a new idea is one of the greatest pains experienced by a human soul. Nevertheless, from the fifteenth century onward, there are to be observed several very important tendencies in education. Among these were the following:—An endeavor to make

education natural and serviceable; an endeavor to introduce more gentle and attractive methods; and an endeavor to make education general.

To the world of the fifteenth and sixteenth centuries a double culture was offered, a culture along *practical* lines and a culture along *literary* lines. The age was one of marvellous activity on sea and land. The art of printing had been discovered; Portugal found an ocean route to the East Indies, the old route by way of the Mediterranean having long ago been closed by the Mohammedan; Spain added the Americas, and Copernicus proved to the world that the sun and not the earth was the real centre of our system. Such discoveries and inventions naturally pointed to a course of studies emphasizing the subjects of mathematics, geography, history and natural science. That this course did not materialize for many generations afterward was due to the discovery of a second class of culture, the culture of the Greeco-Latin worlds, lost to western Europe for several centuries, but flourishing in the schools of Constantinople, the eastern capital of the old Roman empire.

The revival of learning, or *Renascence*, was not merely progress along the old lines. The old foundation was entirely inadequate, for the interests of the Middle Age were interests more or less closely connected with the importance of a preparation for the life to come, and



education was generally looked upon as a sort of discipline or schooling for this. The Renascence was the emancipation of thought. It was the revival of the lost sense of literary form and artistic beauty. It was an eager thirsting after learning; an enthusiasm for literary form and literary achievements, kindled by a contact with the two great literatures of the ancient western world. The Southern Renascence began in Italy, and preceded the Northern or English Renascence by some two hundred years

In its national character the Italy of this day was not a nation. The national idea had been gradually coming into being in some of the other countries of Europe, but Italy, like Greece, was made up of a number of brilliant, wealthy, independent cities in a condition of eager rivalry with one another. To such eager minds the dispersion of the Greek scholars, consequent to the imperilled state of the Eastern Empire, slowly falling piece by piece into the hands of the "terrible Turk," brought the very mental food needed

Italy felt herself to be the heir of Roman greatness. Her eyes looked, it is true, not to a united Italy, but back to Rome, where she imagined she saw her true and only pathway to greatness in the revival of the glory of that ancient city. The Italian Renascence had neither the religious nor the nation-making forces of the subsequent English Renascence. The one great

mission of the Italian revival appeared to have been to acquire and transmit to the rest of Europe a knowledge and an appreciation of the classics. The first duty, therefore, of the lovers of the new learning was to discover and restore the precious manuscripts lying neglected in many a convent library. Too often these manuscripts were found covered with rust and mould, but the search and the discovery were always labors of love. No journey was considered too great nor too perilous; no privation nor fatigue accounted worth the mention, and no price too extravagant for the sake of adding one more manuscript to the collection. No fevered rush of miners to a new field could have exceeded the enthusiasm of the scholars in their search for the old manuscripts.

For nearly the whole of the fourteenth century Latin alone was studied. Finally the Republic of Florence invited Chrysoloras, a learned Greek, to a chair in its university. Thus, after being lost for upwards of seven hundred years, Greek learning returned again to Italy, and pupils from western Europe crowded to the lectures with an eagerness difficult for our age to conceive. So great was their enthusiasm that it was said—"Students dreamed all night of what they had heard during the day." Universities, generally, did not receive the new learning with the same degree of cordiality as Florence, and it is a curious thing to reflect that there

ever was a time when classics were looked upon as an innovation and given a very subordinate place.

Had the Italian Renascence any other result than that of simply recovering and transmitting classical learning? It produced no great literature like that of Spain and England. Italian literary capacity was overburdened by scholarship and declined into mere elegance and correctness of manners. Indeed, in the fifteenth century the language created by Dante as a thing of power, polished by Petrach as a thing of beauty, and trained by Boccacio as an instrument of melodious prose, was set aside, because every Italian writer wished to write his essays and poems in elegant and classical Greek and Latin.

The great work of the Italian Renascence, however, was seen in its contribution to the fine arts. In decorative art of all descriptions, in architecture and in sculpture the Italian masters showed their genius. But it was mainly in the art of painting that Italy won its special pre-eminence and stood then as it stands to-day unrivalled and unapproached.

The light of the new learning had spread beyond the Alps, and because England was the only nation possessing what might be termed a stable government, it was consequently in England that the Northern Renascence reached its fullest development. With its transfer to the North, the spirit of the movement

assumed a double tendency. In the North the revival of learning was bent toward religious and social reform and to the freeing of Church and State from the bonds of authority.

At the dawn of the sixteenth century, England possessed her two famous Universities as well as a number of schools of lower rank, such as Winchester and Eton, but the learning acquired in all of these was about as lifeless as it was meagre. It was about this time that Grocyn, a fellow of Oxford, studied Greek in Italy, and coming back, taught it at Oxford. His example was followed by others, with the result that Oxford soon became a sort of Mecca of the new learning. Here Erasmus found what he had left his native Holland to secure. He remained in England and became one of the greatest leaders in the educational thought of his generation. As a teacher it was the aim of Erasmus to remove the general ignorance of his day, uproot the evils of Church and State, and banish self-seeking and hypocrisy wherever these were to be found. To bring these reforms into effect, he looked toward the efficacy of a broad general culture, a culture that considered the whole range of human activities: a culture that prepared people to live rationally and nobly in all things. The ideal of a *liberal* education was therefore revived. Unfortunately this ideal degenerated and the classical languages, instead of being studied for

the purpose of securing a liberal culture, came to be studied entirely for literary appreciation and finally as a means of formal discipline.

To the old scholastic curriculum of the English Universities, there were added courses in mathematics and in Greek. Subsequently a Latin course was added, and once more, students came in crowds, many to watch and to toil for the sake of the Classics. More Grammar schools were founded in the space of a few years than had been founded during the previous two hundred years. But these were small things in comparison with the remarkable awakening of mental life which followed the burst of the two great classical literatures upon the English world. Men opened their eyes and saw life and reproduced it in the most splendid dramatic literature the world has ever produced. They saw nature, too, and reproduced it, and More saw in his Utopia, the solution of such modern matters as: capital and labor, the reformation of criminals, masses living under sanitary conditions, etc.

When enthusiasm for the new learning was on the wane educational ideas were lowered, the ideal of an educated person becoming synonymous with that of the classical scholar. This ideal created several educative defects, among which we may mention the following:— The literature of the mother-tongue was not considered elegant enough to receive a place in the school pro-

gramme. Students who excelled in learning the classics were looked upon as of much greater importance than the students who could "*do*" things. Little children were necessarily neglected, and only a very small proportion of those who spent several years at school were able to get beyond the Latin rudiments and appreciate the author. The Renascence, however, as a whole, was of tremendous value to the future, and the source of all that helps to make our present lot so superior to that of our ancestors may be found in the living seeds implanted by this movement. These seeds were—freedom of thought, and the spirit of scientific research, together with the ever extending leaven of Christianity.

QUESTIONS.

1. What is meant by the *Renascence?*
2. What other revivals may be mentioned?
3. What brought about the *Renascence?*
4. Give reasons why a *literary* and not a *practical* course was accepted.
5. State the results of the Italian Renascence.
6. How did the Northern Renascence differ from the Southern and why?
7. What is meant by a *liberal* education?
8. State some of the results of the English Renascence.

THE REFORMATION.

(A RESTORATION OF REASON.)

The Renascence had its origin in Italy, the Reformation its source in Germany. German civilization had sprung from German Christianization, while Italian civilization was founded upon classical institutions whose influence was ever present. The German Renascence, too, was democratic as opposed to the aristocratic feature of the Italian Renascence. In a word, the Renascence of the north stood, not for individualism, but for social and general reform. The Renascence was a call to *Nature*, the Reformation a call to *Reason*. The Reformation was, therefore, the natural outgrowth of the underlying idea of the Renascence.

To understand the meaning of the movement known as the Reformation, it is necessary to state the two views held regarding the nature of religious truth in general. From one standpoint religion was looked upon as completed truth, revealed by divine means and entrusted to the custody of a Church, whose authority in turn was also received as divine. In the other case, religious truth, while recognized as of divine origin, was looked upon as undergoing completion in accord with the general progress of the intelligence of the human mind. Each man's mental outfit, such as

it is, is the apparatus by which truth is arrived at. Those who held this view also maintained that the individual and not the authority of the Church had the right to interpret the original revelation which was primarily addressed to the individual.

Such diverse positions could not be held in harmony at an age when the critical faculty had been carefully trained. The result was, therefore, a secession from the fold of the Mother-Church, and to this secession was given the name of the Reformation.

The natural result of the views of the Reformation should have led to reforms in education. That these reforms were delayed was due to the fact that the reformers themselves were not sufficiently conscious of the meaning of the movement, and also from the fact that the old school curriculum could not be readily shaken off. The old literary *(humanistic)* course of studies was, therefore, accepted and modified as the influence of the reform movement gradually deepened. This influence was seen in the idea of a *universal education* which idea was a natural accompaniment of the larger idea that the *welfare of the State depended upon the education of all its citizens.*

The leading spirits of the Reformation were Luther and Melancthon. Luther assumed the leadership of an educational movement having for its object the emancipation of education from the control of the Church, and

the providing of greater opportunities for the education of the masses. Luther contended that schools should be placed within the reach of the people, old and young, rich and poor, and should be for the girls as well as for the boys. Luther also looked toward a state-supported and state-controlled education.

As Luther's time was fully monopolized in directing the religious movement, he left these ideas to be worked out by his followers, chief among whom was Melancthon. At Melancthon's death there was scarcely a town or a city in Germany but had had its schools modified in line with his advice, and scarcely a school of any account but numbered some pupil of his among its teachers. Melancthon's contact with the individual scholar came mainly through his many text-books on rhetoric, ethics, physics and history.

The Reformation, however, was so little conscious of what it implied that it remained without a philosophy for nearly a century. This was found at last in the works of Descartes (1596-1650) and Locke (1632-1704). Different as these philosophers were in character, education and race, both agreed in looking for the guarantee of all truth in some form of experience. "I think, therefore, I am," "Thought and being are one," reasoned Descartes, and Locke practically said the same thing when he said—"Feeling and being are one, etc."

In the general intellectual eagerness and activity of the Renascence and the Reformation times, attempts at reforming the old methods were to be expected. Accordingly, from the sixteenth century onward, we find a succession of teachers and writers who laid down for the guidance of the profession, more excellent methods of teaching. Small effect had these voices in their own generation. But before considering the history and the theories of individual reformers, let us take a brief glance at the one systematic, thoroughly organized and wide-spread system of schools known to the seventeenth and eighteenth centuries, that of the Jesuits.

The Reformation-movement, as we have stated, was not at first conscious of its significance, and this ignorance left the field open to opposition movements having for their object the suppression of the current away from the Mother-Church. These counter-movements made use of *education* and the *inquisition* as their principal instruments, and were controlled for the most part, by the society already referred to.

Founded for the purpose of strengthening the authority of the Church and extending her dominions, the Jesuit society was directed toward the conversion of the heathen and the combating of the so called *Protestant* heresies. The constitution of the order consisted of several parts, the fourth being the celebrated *Ratio Studiorum* or system of studies. This constitution took

form about the year 1600, and remained practically unchanged until the society was abolished. The men who framed the *Ratio*, were among the brightest minds of the Church. These men had a fine appreciation of the value of education on its practical side, and the order possessed the advantage of being able to give to education a continuity of supervision, and the benefits arising from the observations of a great teaching body.

The order had little interest in elementary education and therefore little interest in the education of the masses. It was devoted rather to the education of leaders, and as a consequence concerned itself mainly with secondary and with higher education generally. Usually no tuition fee was charged, a circumstance that gave the Jesuit schools an immense advantage over the corresponding Protestant schools. At the time of their suppression the order numbered some 22,000 members, the majority of whom were devoted to the work of education.

Whatever may be said of the Jesuit schools this much at any rate may be emphasized—"they were very successful schools." The Jesuit schools were successful because of their completeness in organization and the continuity of their administration. What John Sturmius did for one protestant school at Strassburg, the Jesuit order did for a whole system of schools. At the head of the order stood the *general*, elected for life, and thus

able to secure a stability and a unity of action and a perfection of system impossible to secure elsewhere. Under the general was the *provincial* who was responsible directly to the general and who was placed over one of the Jesuit provinces. Over the particular school was the *rector*, and under the rector the *prefect of studies* or educational supervisor and the various members of the teaching staff.

The perfect character of the school supervision; the constant check exercised on one officer by another and the non-professional and professional training of the teachers, prevented any departure from established methods of government and instruction through any peculiarities of teachers, and secured an adherence to the general system that have not been equalled in the schools of this or of any other age.

Supervision, amounting almost to repression on the one hand and espionage on the other descended even into the classes. Students were divided into groups of two, each acting as a check upon the other. Discipline was secured through the ever-present evidence of authority and through the aid of religious motives, and corporal punishment to excess was never used as an educational incentive and was practically eliminated. In place of resorting to physical force, the Jesuit teachers elaborated in their thorough way a system of rewards that made use of the motive of *emulation* to an extent never before nor since employed.

Another cause of Jesuit educational success was due to the thoroughness of the teaching and to the careful preparation of selected teachers. The teaching force was made up for the most part of those who had passed through the heavy course of the *lower* school, and usually the still heavier course of the *superior* school, in other words, through the schools corresponding to our collegiate institute and university. To the scholastic culture was also added a long normal course in an approved school or under the direction of the masters of an ordinary Jesuit school.

As the members were picked men, selected on account of intellectual ability and teaching power, the order obtained a body of teachers far superior to those of the secular schools, and this superiority was maintained so long as there was no great change in either the subject-matter or the spirit of education. With the coming of the eighteenth century, with its movement away from the humanistic content of education and from the theological spirit of the day, the Jesuit schools began to lose their vantage ground and were finally suppressed.

The subject-matter of the courses may be referred to as belonging to the formal humanistic type. In this particular the Jesuit schools did not differ from the other schools of the time in either the scope of the material or the purpose such material was expected to achieve.

There was the same study of *form*, beginning with the grammar and ending with *dialectics*. There was also the same effort made to give students such a grasp of Latin that it could be used as fluently as the mother-tongue. All these the Jesuit schools and the corresponding Protestant schools studied and taught, the only difference being that the Jesuit schools were much more uniform and a great deal more successful than were the Protestant schools. Besides, these schools gave more attention to mathematics and to the rudimentary sciences, as far as these could be gained through the classical texts, than was usually the case in the other schools.

A most distinctive characteristic of the Jesuit schools was found in their *method*. This method was what might be called the *oral* or *conversational* method, and was no doubt instrumental in producing much of the personal contact which gave to these schools a power in moulding conduct beyond that of other schools.

Next to this was the principle of *thoroughness* which characterized all the work of these teachers. Short lessons and frequent reviews were given. The entire work was based upon the principle that an *intensive* study is a better thing in the main than an *extensive* study. That a few lines perfectly understood is better than a page only grasped in part. Hence no single word was left without a thorough explanation. Each

master, too, had the universal custom and the training of the order at the back of his method, a fact that was bound to add dignity to the school, for it gave confidence to the master and was not wasted on the student. This method, perfect as it was in its way, tended to check initiative, prevented freedom of opinion, and prepared for the subsequent decline of the schools.

We may not agree with either the matter or the method of the Jesuit schools, but we are bound to recognize their remarkable success, a success due in the main to three conditions, viz., the devotion of the members of the order; their clear grasp of the needs of their day; and the completeness with which their course of studies was arranged with the view of realizing a well-defined end.

These conditions have not changed, and they are as applicable to-day as they were in the old Jesuit days. We, therefore, require a body of teachers devoted heart and soul to the work of education. We require, likewise, a clearer insight into the nature and extent of education needed to-day by the youth of Canada. We, furthermore, require such a completely graded course of studies or system of education as may assist all to realize the highest ideals of individual and of social life. If the Jesuits can leave us these three things, no one can say that the order has lived in vain.

The educational system of the Jansenists, of Port Royal, near Paris, in 1637-1661, connected with which are the names of Pascal and of Fénelon, attained their importance not from their number, nor yet from the length of time which they existed. The schools of Port Royal attained their importance from the fact that they represented in their conception of education and in their method a reaction against the dominant Jesuit education.

In discipline they were harsher than were the Jesuits, believing that the child's nature was evil and that the work of education was to correct this condition. But this view led to a better conception of subject-matter and of method in education. Studies were simplified and methods of presentation made pleasant. The place of the mother-tongue was elevated. Memory was not placed above the understanding. Attention was paid to the body and the formation of character made a matter of serious care.

The short life of these schools was due to the antagonism of their great rival against whom they had about as much chance of success as a birch-bark canoe would have against a modern battleship.

QUESTIONS.

1. What brought about the *Reformation*?

2. What reforms in education should have followed the inception of the Reformation?

3. Give a short account of Luther's ducational views. Reference, Monroe.

4. What motive prompted the Jesuits to take so active interest in education?

5. What excellencies characterized their schools?

6. Give reasons for their success.

7. Criticize their views on *thoroughness*, *emulation*, and *moral training*.

8. Give an account of the school of Sturmius at Strassburg.

9. What did Fénelon say regarding the "Education of Girls"? Reference, Painter.

REALISM.

(AN EDUCATION BY MEANS OF THINGS.)

While the Jesuits and other great teachers were thinking only of how Latin and Greek might best be taught, other thinkers were making those brilliant discoveries which constituted the beginning of modern natural science. The work of Copernicus was seconded by that of Galileo, in Italy. Galileo invented the refracting telescope and by its aid discovered the moons of Jupiter, the spots on the sun, and the rotation of the sun on its axis. Galileo also discovered the laws of the pendulum and the laws of falling bodies and thereby displaced forever Aristotle's crude ideas which had held the boards for some ten centuries. Kepler, the German, found that the planets moved about the sun in elliptical orbits, and geography advanced by leaps and bounds; thanks to the activity of a series of explorers and adventurers on sea and on land.

At such a time would it not be passing strange if some daring souls did not reflect upon the schools and the school subjects and suspect that there should be other things on the courses of studies than Latin and Greek? Many there were of such, and it is now our purpose to mention the more important of these for the purpose of ascertaining what each stood for in the educational advance.

"As coming events cast their shadows before," we may expect to hear of men, who, in advance of their day made some study of nature and recorded their experiences of the same. Among these mention may be made of Roger Bacon (1214-1294) and Leonardo da Vinci (1452-1519). Bacon's efforts met with little response beyond causing him to be imprisoned as a disturber of the faith. Leonardo da Vinci was really the first man who committed himself to experience ; da Vinci practised the method of science but did not formulate science. This task was left to Francis Bacon, with whom book-science, which suppressed intelligence while pretending to cultivate it, came to an end and was slowly replaced by a direct study of nature, a view which was aided by the new conception of the universe, made possible by the discoveries of Copernicus, Columbus and others. From this time henceforth, we shall find a growing tendency to withdraw education from the hands of authority and to commit it to the care of science.

Enough has been said to indicate the growing discontent of the people with the narrow classical programme of the times. Men clamored for a study of things, real things in keeping with the spirit of the Renascence movement. The result of this dissatisfaction was *Realism.*

Realism underwent various phases, each of which had many devotees. The phases we shall now consider have

been styled by Mr. Monroe in his History of Education* as:—*humanistic realism*, *social realism* and *sense realism*. Humanistic realism was a protest against the narrow view of the purpose of the classical studies in education. To study the classics for the purpose of making modern Ciceros was not making the best use of the experience of the past. A life in contact with nature was the thing. This life the ancient Greeks and Romans lived. And the classics should be studied with the view of appreciating the modern environment. Such was the idea of the humanistic realist, and it was therefore necessary for the appreciation of the ancient life for the students to become acquainted with the immediate life of the day. This, however, was considered as of minor importance, but even an occasional study of the physical and social environments of man for the sake of understanding these in the classics was an earnest of a more practical study of life later on. This phase of realism is illustrated by Rabelais (1483-1553).

The educational importance of Rabelais comes not from any immediate and concrete influence on the schools, but from the influence his ideas exerted upon such educational reformers as Montaigne, Locke and Rousseau. We find in Rabelais an enthusiasm for learning and a tendency to *verbal-realism;* in other words, we find him turning to the classics in order to

*Monroe, Chap. VIII.

know things. So far he was a child of pure humanism. In other respects he advanced far beyond this, and the remarkable feature of the curriculum suggested by him is that it is mainly concerned with *things*.

The effects of the later Renascence was to draw the attention away from arithmetic, music, geometry and astronomy, or the subjects of the *quadrivium*, and to centre the attention on grammar, rhetoric and logic, or the subjects of the *trivium*. Rabelais would reverse this point of view by emphasizing again the practical subjects of the *quadrivium*. In certain particulars Rabelais was also in sympathy with what we now know as nature study and manual work, for he recommended that students should pay some attention to this by advising them to get up at four o'clock in the morning to make observations on the situation of the "dipper," and of other constellations. He also gave hints as to the value of hand-work as well as head-work, and suggests sawing wood and threshing sheaves of grain. To these he would add visits to various trades, that student life might be more closely connected with the general life of the world.

Rabelais saw that the human being was more than intellect and that the intellectual life might be nourished by many other things than books, a feature of school work much in evidence to-day in our needle-work, domestic science, etc. Rabelais would also give

attention to the needs of the body by encouraging physical culture. In this, Rabelais seems to have had the idea of physical culture as a preparation for a gentleman's pastime, war. The effect of this phase of realism upon the schools can not be easily estimated. Its direct influence was exerted by individual teachers and special programmes. It, however, helped to prepare the way to sense-realism which in turn found its place in modern natural science.

Education to the *social realists* was to be made pleasant in its method, and its subject-matter was to be of use to man. Such an education was to furnish a practical judgment for the affairs of life and culture enough to enjoy life's leisure hours. This phase of realism is illustrated by Montaigne (1533-1592) and Locke (1632-1704).

It may be unfair to include Montaigne, a mere gentleman of leisure, among those strenuous souls of whom the world was not worthy; men who devoted themselves with unsparing enthusiasm to the work of educational reform. This, however, is the usual order of advancement. By and by the man of action, of conviction, of fanaticism it may be, comes and forces the world to consider, to combat and finally to accept ideas which other writers and thinkers had formulated and elaborated. Montaigne stands in the order of succession, classed as a humanist, a social realist or a

naturalist according as his educational outlook is conceived to be in line with Rabelais, with Locke or with Rousseau.

Montaigne would discard grammatical teaching in language. He would have the child study things rather than words. He would teach the child to think; to find out things for himself; in a word, to educate himself. Montaigne would also, like Rabelais, pay great attention to physical training. So entirely was Montaigne detached from the thought of the narrow humanistic culture that he scoffed at book-learning and declared that true learning had the present and not the past nor yet the future for its subject.

Education, according to Locke is threefold—physical, intellectual and moral, in other words—vigor of body, knowledge and virtue. In physical education, a "sound mind in a sound body," is the character of the training desired. In short, open air, loose clothing, a hard bed, a simple diet and no medicine—a hardening process from beginning to end. Intellectual education, according to Locke, is a formation of right habits of thought through exercise and discipline. Nothing learned should be imposed as a task. A knowledge of the world of men is more valuable than a knowledge of books. hence the child's tutor should be more a man of the world than a good scholar. If the young man has a knowledge of the

world, virtue, industry and a love of reputation, he will very soon acquire all he needs of philosophy and mathematics. The languages studied should be the languages of his neighbors, and Latin, for Latin is a gentleman's language. With regard to recreation, Locke is no friend of unproductive amusement. He, therefore, advises every gentleman to learn a trade, and suggests painting, woodworking and gardening as suitable. Locke has little faith in what art, science and philosophy can do for a man. His aim is to discipline rather than to educate. He would give just as much instruction in accepted truth as would be necessary for good breeding, but he would make no effort to arouse original thought or induce young men to strike out along new trails for themselves. In moral education, virtue is to be obtained by the formation of good habits, through a long disciplining of the desires. With a view to this, discipline must begin early and parental authority must be firmly established. Cultivate the right disposition and then leave it to find its natural expression. Children should have all possible liberty but they should be guarded against bad company. For this reason, Locke thinks a tutor more desirable than the regular schoolmaster.

Finally, by *sense realism* we mean that view of education grow out of the phases already referred to and contai the groundwork of the modern

conception of education. Sense realism emphasized the fact that knowledge comes in the first place through the senses, and that education is, therefore, based upon a training in sense perception rather than, as heretofore, a training in mere memory. Education was looked upon as a *natural* and not as an *artificial* process; and the principles upon which education was based were to be found in nature. Such a conception gave rise after a time to a science or philosophy of education based upon scientific investigation, and also to a modification of the course of studies by introducing materials chosen from the human and physical divisions of man's immediate environment. Among the sense realists mention may be made of Mulcaster (1548-1611); Francis Bacon (1561-1626); Ratke (1571-1670); and Comenius (1592-1670).

Richard Mulcaster was an English schoolmaster. He, therefore, comes to us with the double authority of one who knows the practical as well as the theoretical values of education. As the head of a humanistic school it is rather startling to know that Mulcaster placed more importance on a study of the mother-tongue than on a study of Latin; that he held that education should not aim at forcing nor repressing the individual; and that education was needed to help nature to her perfection. In all these particulars, Mulcaster emphasized the position of the sense realists.

Highest among those who saw glimpses of the coming reforms in education, and above those who applied the new discoveries to education, stands Francis Bacon, a man who possessed but little knowledge and less interest in either educational questions or processes, and yet who gave to education a new basis and a new purpose.

Why honor Bacon with the title "Father of inductive philosophy and of modern science," when he made no scientific discovery himself, and when the particular form of induction developed by him has never been used, nor is it capable of practical use? The inspiration came from him. He it was who taught that the true object of philosophy was to increase knowledge and add to power. Bacon said—"Let the wise men strive to gain knowledge helpful to their fellowmen. Let man the thinker aid man the laborer; let him investigate the secrets of nature that nature's powers may be used." It is Bacon's glory, when the so-called learned world thought learning meant just so much Latin and Greek, that he, the wisest intellect of the day pointed out as the true field of study that which should subject the powers of nature to the use of man. The power-loom and the sewing machine; the steam engine and the binder; the locomotive and the ocean liner; the telegraph and the telephone, these are all alleviations of labor and of our common humanity, and all have been found along the path pointed out by Bacon.

Bacon influenced education in its purpose, matter and method. The purpose of education must always be for sure human good. The matter is the whole environment of man. Many of the great discoveries of the past had been the result of mere accident. It was, therefore, Bacon's purpose to lessen the factor of chance, and to submit future inventions and discoveries to an orderly compliance with the laws of nature. Bacon held that *power over nature* was the end to be secured. A knowledge of nature was the only source of such power, and the only method of gaining this knowledge was along the line of observation, investigation, experimentation and verification.

In the earlier years of the seventeenth century a man, by name Ratke, travelled through Europe endeavoring to sell to princes and to universities the secret of an educational system or method whereby any person might learn with ease any language. Ratke was also willing to found a school wherein all the arts and sciences might be rapidly acquired and advanced. He even held himself ready to take a contract of introducing and maintaining throughout Europe a uniform religion, speech and government. Archimedes' offer to move the earth, provided a suitable fulcrum were given, was but a mere bagatelle compared to what Ratke proposed to accomplish, and yet, though evidently some-

what eccentric, Ratke was by no means an educational impostor. Indeed, many of the wisest men of his day were impressed by his arguments: the town of Augsburg employed him to reform its schools and two princes afterward united to give him a school of his own where everything in the way of buildings and general equipment were furnished. This experiment failed because Ratke's system and Ratke himself were not sufficiently practical. As Ratke anticipated, a few principles afterwards made use of by later reformers, he has a right to consideration here. Among his pedagogical maxims are the following:—"All unnatural and violent teaching and learning are harmful and weaken nature. One thing at a time. Each thing often repeated. The mother-tongue first and everything in the mother-tongue. First the thing itself: afterwards the sign of the thing. All things through investigation and experiment; nothing should be received on mere authority; the reason and evidence should be examined and apprehended." These principles are surely valuable contributions to pedagogy.

There is no better testimony to the value of Bacon's method than its effect upon Comenius. Here was a man living under the shadow of mediævalism as it were: a man who leaped at one bound to the freedom-giving education of modern times, and did this under the inspiration of Bacon's writings. Comenius saw and

emphasized the need of universal education as essential to universal freedom, and he devoted the years of a long life to the instruction of the lower classes. Before his time no one had brought the mind of a philosopher and the experience of a schoolmaster directly upon the subject of education. It was the belief of Comenius that a better system of education than that in operation could be found were nature's laws but examined into. Children, he said, will learn if they are taught only what they desire to learn, due regard being paid to their age, the method of instruction, and especially when everything is first taught by means of the senses. On this Comenius laid great stress and *he was the first to do so.* Educate the senses first, then the memory, then the intellect, and finally the critical faculty. Keep to this order and the result will be that even young children will find the learning process a pleasant one.

Comenius would even go further; he would have the desire to learn fostered in many ways. Parents should speak well of the teacher and should see that the tone of the home was favorable to education. The teacher should be kind and fatherly; should distribute praise and reward; and should always see that the children had things to look at and to handle. The school buildings and grounds should be attractive, homelike and useful. Buildings should be light, airy and cheerful,

and should be well supplied with materials for illustrating the various lessons. The subjects taught should be interesting to the pupils, and the method should be a natural method. As Comenius' strength was rather in his formulation of educational principles, than in the reduction of these principles to adequate practice, much of this fine talk on school and home environments had to await more modern times for its correct expression.

Comenius was a bishop administering to the spiritual needs of his Moravian co-religionists in exile in Portland. He would, therefore, naturally place the religious purpose of education well in the foreground. According to his views, man's ultimate end was eternal happiness with God. This end was to be secured by obtaining moral control of the *self*, and this control was to be realized by knowing all things, mastering all things, and referring everything to God. Within every human soul nature had implanted the seeds of *learning*, of *virtue*, and of *piety*, and it was the object of education to bring these seeds to full maturity.

The method Comenius would follow is largely the method suggested by Bacon. Comenius, however, doubted the universal value of Bacon's method and looked upon it as incomplete in the determination of truth from error. Yet when he came to the practical problems of the schoolroom it was Bacon's method he employed. This is seen clearly in the following

principles enunciated by Comenius :—(1) If we would teach or learn we must follow the order of nature. (2) Let everything be presented through the senses. (3) From the easy to the difficult ; from the general to the special ; from the known to the related unknown. (4) Fix firmly by frequent repetitions and drills. (5) Choose suitable material ; do not attempt too much ; make use of concrete examples ; and select that which will be useful. (6) Advance so that what is taught to-day may give firmness to that taught yesterday and prepare the way for what will be taught to-morrow. (7) Do not leave the subject until it is thoroughly understood.

Comenius was also a writer of school text-books. Of these the most important were the *Didactica Magna*, the *Janua Linguarum Reserata* and the *Orbis Pictus*. The first was a book of method and the last was the Janua illustrated. While engaged in working out his theory and method of education, Comenius had been searching for an elementary Latin reading-book. He found a suggestion in a Latin-Spanish book, published in Latin-English in London, in the year 1615. Taking this as a model, Comenius then classified the whole universe of things in a manner suited to the capacity of boys. He then searched the lexicons and collected some 8,000 words which he arranged in 1,000 sentences, no important word being used more than once. In this

work, which occupied him some three years in preparing, Comenius has endeavoured throughout to give equal attention to things a id words, but it is the things that give the *cue*. The Orbis Pictus was the most widely used school book ever written, and the first book possessing really educative illustrations.

The Jesuits had done something toward systematizing the secondary schools and the courses of studies of these schools. Comenius was the first to arrange a course of instruction extending from infancy to manhood. This course he divided among four classes of schools. The first, the school of the *Mother's Breast*, afterwards found its proper place in the kindergarten of Froebel. In this school, the child's experience as to locality, time and the causal relationship of many childish events should be made quite definite even before the sixth year, and independent of formal instruction by means of books. In the *Vernacular School*, the school of the second six years of the child's life, instruction and training for the masses should be provided, and such instruction should be given in the mother-tongue. The programme of this school covered the following subjects:—Reading and writing; composition; arithmetic; measuring and weighing; music; memory work in the line of psalms and hymns; catechism; Bible history and texts; moral rules with examples; politics and economics; history of the world; astronomy, physics and geography; knowledge of arts and crafts.

Above the *Vernacular* or *Elementary School*, was the *Grammar School* or *Latin School*, and above all was the *University*.

The first school, Comenius said should be in every home; the second in every village; the third in every municipality; and the fourth in every province. Each provided for a six years' course and represented a certain grade of general culture corresponding to a certain grade of vocation. The first and second schools were for every child; the third and the fourth schools were to fit for the various learned professions.

With Comenius the cause of truth and freedom in education were virtually won, but Comenius himself was practically forgotten until the last century. In spite of this he continued to influence such later reformers as * Locke, Rousseau, Pestalozzi and Froebel, some of whom may never have heard of him, but who are nevertheless, his pupils and continuators. The man who first demanded an education for every human being on the ground of a common humanity, must always be thought of with respect and gratitude.

* Davidson's History of Education, page 196.

QUESTIONS.

1. Write a digest of Milton's *tractate*. Reference, Painter's Educational Essays.

2. "Comenius is one of the most important representatives of the realistic movement as well as one of the leading characters in the history of education." Discuss this under *a*, purpose; *b*, content; *c*, method. Reference, Monroe, page 480.

3. In Locke's view what departments of education were most important?

4. What was *realism?* Name and define the several views of realism.

5. With what educational movements were Francis Bacon, Ratke, and Montaigne interested? State the contributions of each to educational reform.

6. What views of education held by Comenius are now accepted?

7. What new ideas are represented in the text-books of Comenius?

8. Give an account of Francke's work at Halle. Reference, Painter's History of Education.

ROUSSEAU (1712-1778).

(AN EDUCATION IN ACCORDANCE WITH NATURE.)

Rousseau's importance in history is due to the fact that he expressed in his life and writings, and illustrated in his experience the leading tendencies which for many years had been stirring in a sub-conscious way in the heart of society. With Rousseau these attained to complete consciousness. When Rousseau began to write, people were concerned with the growing importance of *nature*, and were also inclined to view man as the author of laws and the founder of institutions. In a word, people had begun to make distinctions between what was really of nature in civilization and what was purely the workmanship of man. It was when these ideas had about reached a white-heat that Rousseau came upon the scene.

Jean Jacques Rousseau was born at Geneva in the year 1712. At birth he was taken in charge by his aunt, a lady of a kindly nature, but a lady wanting in decision of character, a very great weakness when one considers the bringing up of a vivacious, precocious and very responsive child. Rousseau's winning ways excused him from many needed corrections, and prevented him from becoming aware of any moral principles and of running into contact with any disagreeable "*ought*." No wonder that Rousseau's main guides to behavior were

his feelings. No wonder that Rousseau afterwards acknowledged duty from dire necessity or for the purposes of rhetoric.

Taught to read by his father, a man who assumed fatherhood but not its responsibilities, Rousseau was turned loose into a library whose principal feature was the sensational novels of a sensational day, a pitiful training for any child surely. Deserted at the age of eight, Rousseau was placed in the charge of a maternal uncle who sent him to be educated by a clergyman living near Rousseau's home. Here he had about the same kind of training as that previously given. So far he had had no preparation for a human life, and such a life involving regular habits, concentration, obedience and self-denial he was now called upon to live. He had to earn his own living.

When scarcely twelve years of age he was placed in the office of a notary, where he found the work so tedious that he was dismissed. His experience at an engraver's was no better, and Rousseau, sick of what could only be drudgery to him, fled from the hateful locality under the shadow of the night after having endured that "coarse, violent man," the engraver, for about four years. Having resolved to see something of the world, Rousseau became a tramp, an occupation, by the way, that was certainly in the line of his previous training. He wished for freedom, and he could now

realize his wish and flit here and there utterly unconscious of there being such things as duty and self-denial in the whole wide world. From this hobo-life, Rousseau learned that the courts and the camps of life were less interesting than those of the books. He also developed a passion for the country people and for country scenery, and all of these experiences told in the future.

For the first thirty years of his life Rousseau was simply a bundle of desires, responding to outside stimuli in much the same manner as in the case of the lower animals. Toward the close of this period symptoms of a better nature appeared. Rousseau discovered that he could write, and in order to write he must have more congenial surroundings.

It was about this time that he met his "Theresa," a woman of few charms but a woman who must have possessed that which was permanently congenial to a man of Rousseau's nature. Rousseau did not look for intellectual companionship, but he did want an inexacting affection and a thousand and one little attentions quite in keeping with gross stupidity. These he found, and his loyalty to this serving maid is perhaps the noblest feature of an otherwise intensely selfish life. "I lived with my Theresa as agreeably as with the greatest genius of the land," is a perfect summary of this strange alliance.

Rousseau wrote many treatises, but the work of most concern to us is the Émile, *an education in accordance with nature.*

Rosseau's educational system, if it meant anything, meant a preparation for the sort of life that his own nature suggested as the happiest, namely, a quiet, uneventful life, free from all things of a serious nature. "How can a child, born in a civilized society, be so trained as to remain unaffected by the vices which are inseparable from civilization? Rousseau's answer to this is the Émile. In this work education is viewed as a *negative*, protecting process; a warding off of external evil that the good inherent in every child may have a chance to unfold itself. "Everything is good as it comes from the hand of the Author of things; everything degenerates at the hands of man." This is the opening sentence of the Émile and the keynote of a tale purporting to be an account of the proper training of a youth taken from his parents and placed in the charge of an ideal tutor, who educates him in intimate contact with nature.

According to Rousseau *nature* is merely habit, and education is nothing less. In acquiring an education Rousseau would make use of such equipment as was native to the child, viz., his natural interests, first impressions and instinctive feelings and judgments. These are more to be trusted than are the judgments and other

second-hand experience coming from association with older people. In a word, Rousseau would have education based upon the true nature of man. The evil education of any association with man, Rousseau would counteract by exposing the child to a fearless and intimate contact with nature's phenomena. What Rousseau says of the wisdom of freeing children early by a careful habituation from such fears as toads, snakes, spiders, etc., is excellent. What a pity that any one should grow up and not see that

> "Nothing useless is or low:
> Each thing in its place is best,
> And what seems but idle show,
> Strengthens and confirms the rest!"

Much of that cruel want of sympathy for all things not considered sufficiently aesthetic, is due to a neglect of Rousseau's precepts.

Again, human nature in Rousseau's time was looked upon as essentially depraved, and the purpose of religious training was to replace this characteristic by an opposite one shaped under the direction of man. Rousseau objected to this, and demanded that a child's first education should be purely *negative*, an education that simply guarded the heart from vice and the mind from error; an education moreover, that looked first to the perfecting of the organs which were the means of knowledge, before furnishing the knowledge itself. In other words, Rousseau would prepare the mind to think by first giving the

senses their proper exercise; he would also prepare the mind for receiving instruction on the duties of man before giving it that instruction. By so doing, Rousseau believed that the child should be so trained that when truth and beauty and goodness were presented, the mind would understand them and the heart appreciate them.

Applying the principle of negative education, Rousseau recommended that the fullest freedom be given the child. Like Locke, he advocated a plain diet, loose clothing, no medicine, and a life in the open air. "Childhood is the sleep of reason," therefore the child should not be expected to reason, but to prepare for that time when the harvest of the reason should arrive. When applied to moral training, the doctrine of a negative education, advocated a *discipline by natural consequences.* If the child is slow in dressing for the walk, leave him at home; he will in all probability be on hand the next time.

The educational life of the child as given in the Émile is divided into sharply defined periods, having little or no connection with each other. In the first period, or the first five years of the child's life, the father is the natural teacher and the mother the natural nurse. By these, the early training, largely physical, is to be given In dealing with this stage, Rousseau lays down many negative but sensible rules. Do not swaddle the child. Do not rock him. Do not make a fuss when he falls, etc. In other words, the child is to be allowed the full

freedom of limb and voice. He is also to be allowed a sufficient acquaintance with heat, cold, and risk, in order to make him robust and courageous.

In the second stage, the stage from the sixth to the twelfth year, education is to be governed by two principles; education must be negative, and moral training one of natural consequences. Instead of giving all sorts of ideas to the child, the mind should be left unforced. "Childhood is for its own sake. Exercise the body, the organs, the senses, but keep the mind lying fallow as long as you can." Here is where Rousseau protests most strongly against the dominant education. Learning from books is done away with and an education that trains the child to measure, weigh, compare, to draw conclusions, to test inferences, etc., substituted in its stead. Such an education is to be a training of the senses, gained by an intimate contact with the forces of nature. "Let childhood ripen in the children," is a summary of this period.

In the third period, namely that from twelve to fifteen, Rousseau would educate the intellect. Rousseau's solitary pupil at the age of twelve would have learned nothing more serious than play, but in playing, his muscles, nerves and senses would be trained. Émile would have no knowledge of man, but he is as supple, as alert and as healthy as a well-trained puppy. He must now get down to study, but he has not learned

how. Rousseau understands the situation and provides the programme. "After all," he concludes, "there are not many things to be known that are of any great use, and the test of everything is the practical test." Mathematics and science, just a little, but Émile must invent both. Rousseau recommends Robinson Crusoe, as a study according to nature. Émile must also learn a trade; not for the sake of knowing it, but because such work may help him to overcome any tendency to despise labor. At the end of this period, Émile had little knowledge, but what he had was really his own.

Hitherto Émile's body, senses and mind have been looked after. It is now time that he should be educated for the social life he must soon live. His education is also to be strictly moral and religious. In discussing this period Rousseau seems to have the idea that the sentiments may be educated as the mind and that one may learn to love as he learns to work arithmetic. This is Rousseau's scheme in outline. What is its value? Has it led to the results claimed for it?

The influence of Rousseau's ideas upon educational theory and practice was very great. His passionate appeals roused men from their slumber and forced them to reconsider all that had been hitherto taken for granted. His bitter condemnation of the corrupt fashionable life of his day with its dehumanizing notions of education, and his eloquent plea for a return to a life

simply human, and to an education based upon the principles of human nature and calculated to prepare for such a life; these were all timely and well taken. When Rousseau came to inform the world how all this was to be carried out he undertook a problem beyond his powers of solution. Rousseau, however, seems to have placed stress upon the following:— Education is not an artificial process; education is a development, a development made possible through the working of the child's own interests and instincts.

Previous to this time the child was viewed as a *little man*. He was supposed to think, feel and act as a little man. He studied the same subjects as his larger brethren and studied these by the same method, namely, through grammar of the most formal sort, and by means of the verbal memory. If this artificial view could be set aside it would also mean the abolition of all the artificial methods which such a view succeeded in collecting about itself. Education could then find its real *purpose*, process and method within the nature of the child's own life and experiences. In this we have the germ of modern educational thought and practice.

In spite of his many defects, it has been given to but few men to exert an influence so deep as that of Rousseau, and this influence extended to all departments of human activity. In philosophy, Kant has said that he was aroused from his dogmatic slumber by

Hume, but after being aroused he drew his chief inspiration from Rousseau. Growing out of Rousseau's conception that instruction should be based upon a study of the natural outfit of the child, there grew the educational work of Pestalozzi, Herbart and Froebel. Rousseau's idea that the educational material should be the facts and the phenomena of nature led to the development of modern natural science. Rousseau's passionate love of natural scenery inspired many in the direction of art and literature. Indeed, modern art and literature with their fondness for the natural, the rural, the picturesque, their analysis of sentiment, etc., may almost be said to date from Rousseau. Finally, Rousseau influenced politics The French Revolution was largely his work, and the war cry of that bloody time — "Liberty, Equality, Fraternity," were words borrowed from Rousseau.

Basedow (1723-1790), the next educator to be considered, was a disciple of the great Rousseau. At his school at Dessau, known as the Philanthropinum, he attempted to work out some of the ideas of his master. Basedow's school appears to have been a sort of unsystematized kindergarten, where the children had a jolly time of it. They were not kindergarten babies but older children to whom it was above all things incumbent, in their parents' opinion to learn Latin, and Latin they were taught in a series of hilarious games.

The important feature of this innovation lies in the fact that here was an experiment where the needs of the children, as children, were taken into account.

The experiment failed, but some of its fruits were afterwards seen in a stronger sense of the value of trained teachers, the introduction of the wood-work phase of manual training, the connection of the school work with the world outside, and the employment of the object-lesson as an important school feature.

QUESTIONS.

1. What does *Nature* mean in the Émile?

2. What is the meaning of a *negative* education?

3. Criticize Rousseau's conception of education.

4. What kind of education did Rousseau consider suitable to children during the first six years of their lives? During the next six years? During the next three years? Point out in each case the strong and the weak points.

5. What kind of education should be given to girls, according to Rousseau?

6. What did Rousseau say regarding the doctrines of interest and of self-activity?

PESTALOZZI, HERBART AND FROEBEL.

(AN EDUCATION BASED ON THE NATURE OF THE CHILD.)

Before Rousseau's day it was customary to look upon education as a sort of artificial process by means of which formal knowledge came into the possession of the school children. Since then, education has come to be regarded as an evolution; a growth from within; an expansion of one's natural equipment. The efforts of Pestalozzi, Herbart and Froebel were, therefore, directed toward the work of attempting to state the position of Rousseau positively and to secure the right practice for the same. Out of this there came a more kindly spirit in the schoolroom, better trained and better teachers, an education that included poor as well as rich, and an education founded on the nature of the child itself.

When we consider the importance now attached to popular education, we may have some difficulty in understanding that it was not so even a hundred years ago. We may even declare that before the time of Pestalozzi popular education as such did not exist. In Germany, Luther had proclaimed the need for it, but the schools which he created were schools where the pupils' energy was exercised largely in learning the catechism. The children of the lower classes, if they went to school at all, learned a little reading and writing, and learned these in a very imperfect manner. Again

and again the office of teacher was filled by some old soldier, or by a servant out of a situation. Indeed, the *trade* of schoolmaster had become the refuge of all who could not secure any other employment. As the method used was on an equality with the teacher, the rod took the place of all pedagogy, and the verbal memory was the only faculty exercised.

Comenius, it is true, had made some progress as early as the seventeenth century, and had indicated to a certain extent the road to be followed, by pointing out the value of direct observation as a means. Rousseau thought that the poor required no education, and even went so far as to say that he would not give himself any concern about the education of a delicate child, even should that child live to be three score years and ten.

For Pestalozzi then, and for Pestalozzi alone, was reserved the fame of restoring to credit the processes of the method of sense-perception already known and in a measure applied, and of determining the social value of education as a whole, and the best method of determining the process. As Pestalozzi's life has been a source of much encouragement to many a despairing teacher, the facts of this life are given as follows:—

Heinrich Pestalozzi (1746-1827) was born at Zurich, Switzerland. The death of his father placed his childhood in the care of a refined and sympathetic mother

who did her best to provide the training that should have come from the manly virtues of a father. The hours spent by this spiritually minded boy about his mother's hearthstone were, however, the hours when the lad's soul drank in those things which he afterwards turned to account in helping to better the lot of his fellowman. As a boy at school he was noted for his supreme ignorance or innocence of the common affairs of boys. No wonder he was nick-named Harry Oddity, and loved, too, for his kindliness of heart. Later he read the Émile and became an ardent revolutionist. As a boy he spent his vacation with his grandfather, a clergyman, who did much to relieve the suffering and ignorant poor. Small wonder then that Pestalozzi should first attempt theology, which he gave . . law which he in turn set aside to become a farmer. If we understand Pestalozzi aright, all these cha ges were due to his desire to gain such a positio n as should help him best to realize the great desire of his heart, viz., to be the means of lifting the peasant class and the poor generally to a higher and happier position.

Pestalozzi entered upon an agricultural life for the purpose of showing what a scientific farmer could do with a piece of land, the equal of which in infertility could not be found in the whole of Switzerland. He may also have chosen this occupation because in it he

could have an opportunity of living, as Rousseau had commended, a life in accordance with nature. As a farmer, Pestalozzi was a complete failure. But this failure gave him an opportunity of trying an experiment much nearer his heart—the founding of an *industrial school* for destitute children. So Neuhof, the name he had given his farmhouse, became a refuge for a number of the children of the very lowest class. These children were fed and clothed at Pestalozzi's expense, in return for which they were set to work to raise various farm and garden products in the summer season, and at spinning and weaving cotton during the winter. While thus engaged they spent some time in reading; in committing verses to memory, and in working arithmetical problems. Pestalozzi wished to help the peasant poor. The only help that would prove of value was education. In other words, he wished to place the children in a position where they could help themselves. As character is shaped to a considerable extent by environment, Pestalozzi surrounded the children by the best conditions he could command. But the combined responsibilities of manager, teacher, gardener, etc., were beyond one so impractical as Pestalozzi. The children experimented upon were the very refuse of society, while the people of the locality were entirely unappreciative of Pestalozzi's purpose. The experiment came to an end for want of funds but not before it had given the world an idea that modern times has turned to

account in the many industrial institutions of this and of other lands.

The next eighteen years Pestalozzi devoted in part to literary work and to the encouraging of the revolutionary movement that had arisen in France. Pestalozzi began to write at the suggestion of his friend, Iselin of Basel, and for the purpose of supplying himself and his family with the necessaries of life. Had Iselin hinted at catching mice for a livelihood, Pestalozzi would have followed the advice just the same. His most popular work, a work that exerted the greatest influence, was "Leonard and Gertrude." This work pictures the simple life of the people, and the changes brought about in a certain little village by the wisdom and the devotion of a simple-minded woman. By her industry, and patience, her skill in training her children, Gertrude saved her husband Leonard from becoming a drunkard. Neighbor's children came within the sphere of influence and in the end, the whole village was improved. "Leonard and Gertrude" was an effort to popularize the new education of Pestalozzi, an education that was to consist in a moral and intellectual growth of the child, a development which would in turn affect a similar reform in society as a whole. To bring such a condition into realization was Pestalozzi's mission as an educator.

In the year 1798, Pestalozzi set aside theory for practice. "I will turn schoolmaster so that practical demonstration may be given my theories." No stronger testimony of the value of these ideas can be found than the fact that here was a man past his fiftieth year, a man who had little learning and no experience as a teacher, a man, too, who had made a failure of everything he tried; yet this man has had more influence than any other person upon the educational reforms of the succeeding years. A reason for this is seen in Pestalozzi's tremendous enthusiasm and also in the fact that his ideas being founded upon experimentation were therefore incomplete, but suggestive to those who succeeded him and who endeavored to build upon the foundation laid by him.

In the year above mentioned, Pestalozzi accepted the charge of an orphanage at Stanz, and his appointment came about in this manner. In 1798, Switzerland was overrun by the French and everything was remodelled after the approved pattern. Certain Roman Catholic people at Stanz, not willing to give up their local rights objected. The French troops thereupon slaughtered the fathers and mothers of the district and made orphans of their children. Pestalozzi was asked to become father, mother, nurse, doctor, teacher, etc., to these children. He repaired at once to Stanz, glad of having an opportunity of doing something. With these

children he first worked out the germs of the new educational practices. Here, again, he combined hand and head work; and here he found that the experience of most worth to mental development was the experience coming directly from those activities of greatest interest to the children.

The experiment at Stanz, has often been alluded to as an educational miracle. Look at the difficulties of the situation; more than forty children who had to be housed, fed, nursed and taught, a problem of itself surely difficult enough. Add to this the fact that few had books or slates; that Pestalozzi was a Protestant appointed by a hated government to teach the children of Roman Catholic parents. Add further the success attending the efforts of a few short months: happy children, a school atmosphere where love prevailed, and wonderful progress made in reading, composition and arithmetic. Put all these together and say whether this experiment was or was not a miracle. But poor, old Pestalozzi could not stand the tremendous strain. His health failed and a period of rest had to ensue. On his recovery he found his children scattered and the convent utilized by the French for hospital purposes.

At Burgdorf, in the following year, he was allowed to share the class of a shoemaker who taught some non-burgher children in a schoolroom in the loft of his shoeshop. As there was some danger that Pestalozzi's

kindness of heart would win all the children, the shoemaker grew anxious when he thought that such a condition might eventually lead to a financial loss on his part. He, therefore, worked upon the suspicions of the parents of the children by representing Pestalozzi as a faddist, in fact a dangerous man to intrust with the education of the children. To relieve matters, Pestalozzi was appointed to one of the village classes, where he worked out the meaning of the object-lesson as a means of mental development. A private school, partially endowed by the government, was subsequently opened in the old castle of Burgdorf, and here Pestalozzi, ably assisted by several teachers in sympathy with his ideals, conducted a series of educational experiments with teachers and pupils along the lines of the new thought.

The work at the institute of Burgdorf, directed as it was toward the education of the children and the training of teachers, was watched with very great interest and widely discussed through magazine and pamphlet controversy. But again Pestalozzi was forced to abandon his post and withdraw to Yverdun, where his last and longest experiment was conducted. Here, more than hitherto, the work was directed toward the training of teachers and in direct experimentation with the view of reforming existing methods. Text-books were prepared; students from almost every country

were trained; and noble visitors welcomed almost every week. But the task of managing so large an institution, to say nothing of the labor of conducting a world reform, was too great for the old enthusiast, who was over sixty when the institute was organized, and who never possessed any ability for practical management. The following summary of Pestalozzi's life is found on his tombstone:—

"*Saviour of the poor at Neuhof; Preacher to the people in Leonard and Gertrude; Father of the fatherless at Stanz; Founder of the new Elementary School at Burgdorf; Educator of humanity at Yverdun. Man—Christian—Citizen. Everything for others,—nothing for himself. Blessings be on his name.*"

Having become acquainted with a few of the main features of Pestalozzi's life, in what particulars did he influence education in general? To appreciate Pestalozzi's work properly, it is necessary to have some adequate conception of his time. Think of the unsettled condition of France and western Europe generally. The people felt that something was required, but what? No wonder there were some who advocated a new religion, and others who advocated no religion; some who looked to a settled government and others who looked to a reign of anarchy as being the safest road to social regeneration. Throughout these evil days, Pestalozzi stood like a prophet of old, and pointed to a

new education as the surest means to social order. Think again of the old educational point of view:—An attempt to teach religion through the catechism; an attempt to gain thought through an ability to read words, words, words. An attempt to study mathematics and natural science apart from practice. Think of these things, and try to answer how it was possible for such a conception of education to properly adjust the child to his environments? In opposition to this attitude place the new idea, namely, that education should develop the elements of power implanted by nature, and should develop these by exercising the natural capacities on a properly selected and properly graded series of experiences. Again, think of a day when any idle person was not considered incompetent when teachers were wanted. Think of Pestalozzi's experience with the village shoemaker who made shoes as his business, but who also "kept school" on the side. It was Pestalozzi who emphasized the place of love in education. It was he also who demanded that the schoolhouse should embody the best home ideals of the district.

In the matter of method, we may mention, that Pestalozzi placed the greatest stress upon *mental*, rather than upon *written* arithmetic. Instruction in primary number was connected with the concrete, and children were made to think. Geography was based upon the surroundings, the schoolyard or the village furnishing

the simple elements which in turn expanded until a knowledge of the earth, as a whole, and its relation to man were developed. Music and gymnastics also formed important parts of his programme, the latter being a complete innovation, inasmuch as Pestalozzi made some attempt to treat the various school games from their educative standpoint. Again, with Pestalozzi, composition seemed to be of greater importance than formal grammar. These, however, are but a few of the many features of Pestalozzi's school. The great purpose of his efforts was to reform existing methods in the interests of the poor and the needy, and at this task he labored, forgetting himself because of his great love for the masses and because of his compassion for their often wretched condition.

Herbart (1776-1841). The work of Herbart may be said to consist in an attempt to unify the work of Pestalozzi and that of the old education, and in recognizing the parts played by mental construction and memory in the act of acquiring knowledge. Herbart maintained that the mind acted as a unit, that it possessed no inherent faculties, but that it was capable of entering into relations with the external world through the medium of a nervous system, and that it was thus able to become mind. In other words, the mind is built up by the use made of its own experiences. Herbart argued that the mind was neither inherently good

nor bad, but that it may develop either way according to the material received and the manner it assimilated this material. Indeed, the great feature of mind, as viewed by Herbart, is this very power of assimilation, therefore, education by determining what experiences the mind receives and the way these experiences are built up into the higher mental processes is the chief factor in estimating both the mind and the character. Herbart, furthermore, was of the opinion that the will should not be looked upon as an independent faculty, a sort of autocrat of the mind, but rather as a *functioning of mind* growing out of and being dependent upon the mind's effective experiences.

As the process by means of which new experiences are assimilated, the process of *apperception*, is essential, such a process must be looked upon by the teacher as one of first magnitude, because, through this process the mind receives its ideas, ideas lead to action, and action determines conduct. If conduct, and therefore character, depend upon the experiences acquired, the method of acquisition can not be considered a matter of trivial importance. It is the teacher's business to know what experiences *ought* to be presented. It is also his business to know how these experiences *should* be presented. We may, however, be able to lead the horse to the water-trough: how shall we make him drink?

Herbart recognizes this and supplies the remedy. As attention is based upon the ideas contained by the mind then is it the teacher's business to see that the children should be deeply interested in the various subjects of the programme of studies. To succeed in this, the teacher must see to the materials of instruction and also to the method. Out of these two features have grown the principle of the *correlation of studies* and the *doctrine of method.* By the former is meant such an harmonious organization of the school subjects as shall contribute in the best and most economic manner to the mental and moral growth of the children. Correlation of studies condemns any attempt to isolate a school subject; school subjects should support each other whenever this is possible and desirable. Herbart also said a great deal regarding method. Indeed, the enthusiasm to-day for correct procedure in the presentation of the several school subjects is but an echo of Herbart's. Herbart's influence is seen in the emphasis placed upon the recitation rather than upon the general school spirit. His influence is also seen in emphasizing character as the goal of all educational effort. Herbart aided the cause of educational reform greatly in recognizing the importance of a psychological basis of education. Herbart's psychology, faulty as it may be, has, nevertheless proven an excellent pedagogical incentive for upwards of half a century.

Friedrich Froebel (1782-1852). In Froebel's day the child remained, except to fond parents, a supremely uninteresting being until he had made some progress at school and could show off the teacher's power to advantage. With all his enthusiasm for education and his desire to place it on a scientific foundation, Comenius had really very little scientific insight into child nature. It was Rousseau who pointed out where the blundering occurred. He declared that teachers did not understand children, and that a knowledge of child nature and child mind was of first importance. Rousseau, however, failed when he tried to give practice to his views, but his work inspired Pestalozzi and persuaded him to base everything on an intelligent perception of things. What Pestalozzi failed to see was that before the period of sense-perception there is a period of confused emotions and sensations, a period during which the child's mind is struggling to work a way toward definiteness, and it was just in this period that the genius of Froebel was most in evidence.

Pestalozzi, Herbart and Froebel all made moral character the end of education. Pestalozzi would secure this by external means, Herbart by instruction and Froebel by emphasizing the emotional side of child nature. Froebel's greatest service in the future will be in the reforms which his methods and principles will have forced upon the higher schools, colleges and even universities.

Froebel was born at Oberweissbach, a village in the beautiful Thuringian Forest of Germany. His mother he lost in his infancy; his father, the village pastor, attended to his parish but not to his family. Froebel was, therefore, left in charge of the servants, who turned him over to his older brothers and sisters, who left him to get on as best he might. Matters were improved for a short time when a stepmother came to preside over the family, but in the end, Froebel was left to such consolation as a little child could gather from the rustling of the leaves, the whispering of birds and wind, and the hundred and one other sounds and stirrings of the neighboring woods. At school, Froebel's mind, busy with more important things than were on the programme, would not work along the lines of the dry, old course. As a result, Froebel was counted a dunce, and his father was advised of this when the time came to send the boys to the university. Froebel's brothers were, therefore, given a university education, while Froebel, himself, was apprenticed to a forester for a period of two years. On leaving the forester, at the age of seventeen, Froebel appears to have caught the main idea which was to influence him during the remainder of his life. This idea, stated in a nutshell, he called the ***unity of nature.*** Thinking that a study of the natural sciences should aid in securing a full mastery of the idea so that it could be used as a basis of advance, Froebel with much difficulty found his way to the university, where

he went from classroom to classroom in the hope of being able in a short time to gain what he so much desired. His money running short, his career at the university ended when he was placed in the university carcer for nine weeks, for having incurred a debt of a few shillings.

For the next few years Froebel became in turn an accountant on large estates, a surveyor, a private secretary, in short, anything that could help him to earn an honest penny. At twenty-three he was persuaded to enter a Pestalozzian school at Frankfort, where he found his true calling in life. Becoming dissatisfied with his professional standing after a couple of years, he was put into touch with Pestalozzianism, and even spent two years at Yverdun with Pestalozzi. From this experience came an enthusiasm for educational reform, for which he now prepared by completing his university course.

In the year 1816, in the peasant village of Griesheim, Froebel opened his "Universal German Educational Institute," his pupils being his own nephews. Removing to Keilhau in the following year, Froebel gathered about him a competent staff, and worked along a line of educational improvement somewhat similar to that followed by Pestalozzi. Here, however, he soon met with the disfavor of the government at Berlin, and was suspected of being at the bottom of some of the

socialistic literature which was being spread over the length and the breadth of Prussia. A government inspector was soon dispatched to Keilhau, and advised to make a diligent search into the whole institution. This inspector's report completely exonerated Froebel, and commended his school to such an extent that Froebel became a prominent figure in German school life. Not satisfied, however, the Government took no precaution to conceal its dislike, and the result was the closing of the institute for want of children to attend.

Froebel was afterwards invited to Burgdorf, where Pestalozzi had formerly labored. Here he was asked to undertake the establishment of a public orphanage, and also to superintend a course for Swiss school teachers. In his conferences with these teachers, Froebel found that all the schools suffered from the unsatisfactory state of the raw material entering them. Until the school age was reached children were entirely neglected. Froebel seized upon this neglected period of child life, and when his ideas were fully matured he returned to Germany and opened the first *kindergarten* of history in the village of Blankenburg in 1837.

Convinced of the importance of this school, Froebel described it in a weekly paper. He also lectured in the great towns and even went so far as to give a kindergarten course of instruction to the young teachers of Blankenburg. The first kindergarten, however,

failed for want of financial support and Froebel devoted the remaining years of his life to an endeavor to educate Germany and the world in the matter of kindergarten education.

While at Keilhau, Froebel wrote his "Education of Man," a book embodying, as one has said, "all the best tendencies of modern thought on education," but unfortunately a book so written that the real meaning of the author can not readily be grasped. "Centuries may yet elapse before my view of the human creature as manifested in the child, and of the educational treatment it requires, are universally received." If this is Froebel's own judgment, then there is no wonder that we have as yet made so little headway with the "Education of Man." Froebel's main idea may be stated somewhat as follows:—The process of education is the process of the evolution of man. To develop properly we must have exercise, and that exercise, too, which is in harmony with the nature of the thing and suited to the capacity of the thing. The best exercise comes through the child's own activity, hence self-activity is the first law of instruction. In a word the child must be looked upon as a creative and not as a receptive being, and education must at all times take as its starting point the natural desire of the child to express himself in action. The school to Froebel was the place where the child realized his own personality and developed his own independence of mind in associa-

tion with children of his own age, and in exercises naturally interesting to all

An account of the education of children between the third and seventh years is an account of the kindergarten. The kindergarten is a system of education intended to precede the regular elementary training, and to prepare for this by exercising all the powers of the child with the view of rendering him self-active. Froebel discovered many powers dwarfed in infancy and in early youth because of suitable mental and physical nourishment being withheld. He believed that every child might be developed all round, providing proper amusements were furnished. He, therefore, studied the games and plays of the children of modern and of ancient times, and tried to find out the special adaptation of each to mental and physical growth. By so doing he formed a system of culture adapted to very young children. This in its first stages was made up of ball games accompanied by songs, later with such geometric forms as the sphere, cylinder and cube, with which a variety of interesting exercises were associated, while all were intended to increase the attention and the initiative of the children.

The exercises of the kindergarten are carried on now in a sitting posture, now standing; now walking; all this for the sake of variety. These exercises, moreover, are all such as may be successfully carried out by any

person of ordinary ability and tact. They consist of easy ball games, marching, singing, light gymnastics, reciting children's poetry, imitating the doings of animals and the occupations of men. The teacher is not to teach but to lead the pupils by conversation or questions, so that they may become inventive rather than dependent upon the teacher. The discipline, too, is never to be sought for by authority, nor by any mechanical means. If the child be kept profitably busy he will do nothing out of harmony with the school. If the right spirit be present all the moral influences which should spring from cheerful, self-active, happy children should not be wanting. Has the kindergarten anything to do with the work of the ordinary rural and village schools of Canada? Much in many ways. First of all, the kindergarten illustrates the great principle of the necessity of making school work interesting to the little learners. If the kindergarten knowledge of normal school students will induce them to put just a little of the kindergarten spirit into the work of the primary grades it will repay a hundredfold. If it impresses the fact that the child-mind deals with the concrete rather than with the abstract, and if it induces teachers to conform their instruction to this principle, it will make them much better primary teachers than the great majority of their predecessors. If it finally succeeds in imparting the truth that activity is one of nature's own laws of child growth, and causes teachers to

furnish employment to the smallest children, it will bring such a love of school that study will be a delight and teaching a pleasure.

One of Froebel's strongest influences upon the practical work of the school is seen in the place he gave to play in the earlier stages of instruction. It is through play that the child first pictures the world to himself; it is therefore through play that the instructor can give the interpretation of the life he wishes to impart. Froebel also gave to manual training and to industrial education of every kind the place which these are so rapidly occupying at the present time. Finally it is from Froebel that some of the best suggestions in the field of nature study have come, and from him, too, the strongest guarantee of the sanity of the modern nature study movement.

QUESTIONS.

1. Compare the educational ideas of Rousseau and Pestalozzi; of Rousseau and Froebel.

2. What modern schoolroom practices can you trace to Herbart and to Froebel?

3. What did Froebel owe to Pestalozzi?

4. To what extent can the work of instruction be made to bear directly upon conduct according to Herbart?

5. Give an account of Pestalozzi's work at Stanz and Yverdun.

6. Write an essay on the "Psychological Tendency in Education." Reference, Monroe's History of Education.

SPENCER AND HUXLEY.

(AN EDUCATION BY MEANS OF THE NATURAL SCIENCES.)

Before the period of the Reformation, Latin was the subject *par excellence* on the various school programmes. Since the Reformation, Latin ceased to be the religious language of a large portion of Europe. With the extension of the various modern literatures, Latin could not claim to be the sole means of literary culture. Still, Latin had several centuries back of it, and if ever a school subject had time to become systematized, that subject was Latin. What if Latin ceased to exert a living interest? The world was not yet ready to set aside a subject upon which the greatest men of two centuries had fed. Notwithstanding all this, a new theory had to be devised for retaining Latin in its place, and this theory was soon forthcoming. It was this, the valuable thing in education is not the thing learned; the really vital thing is the learning process. The argument resulting in this conclusion may run somewhat as follows:—"Latin has been tried and has not been found wanting. Latin was good enough for our fathers and our grandfathers. Latin made them great and it will help to make us and our children great. The proposed change is radical. It will surely destroy our most cherished institutions, etc." The theory stated is an enunciation of what is called the *doctrine of formal*

discipline, a theory which posited that a few subjects thoroughly taught and mastered, would be of much greater educational value than half a dozen or more subjects demanding the same time and energy. Mathematics, the classics and logic train the various mental faculties so perfectly that the memory will be developed, the reason strengthened and the mind as a whole so equipped that success will follow, no matter what the nature of the work of life might be. As there were none at hand at this time to urge the ground that since all mental exercise takes its rise in a special mental content, its character would be determined by its origin. In other words, it would be nonsense to assume that thinking power developed, say by the study of mathematics, would as such, have any value in the field of botany. Such thinking to be of use must spring from a biological content and from nothing else.

As time went on the natural sciences gathered strength from several sources. Rousseau had mentioned the importance of nature-material. The sciences of physics and biology had grown apace. Extraordinary activity along the line of inventions had created a feeling in favor of science. All these helped, but the sciences had to fight every inch of the way before they were admitted to the universities and the schools. Some of the reasons advanced by the devotees of

science are as follows:—The study of science furnishes a capital training for the observation. In other words, the use of the so-called *laboratory-method* furnishes an exercise not merely for the senses but also for the mind. A second reason is found in the consideration that a study of science should train a student in the organization of his experiences by comparison and induction, developed in a specially valuable field. The student of science experiments with the facts themselves and not with grammars and lexicons and the various other symbols of facts. Here the scientific method may be employed, and here, too, the principal value of the study of natural science is found. Again, the study of science disposes the mind to deal with all questions in a dispassionate way. The study of science should develop open-minded, cautious reasoners: persons who do not use their reason to find arguments to defend conclusions furnished from some external source, but who use reason to learn what is true. How many studies there are so filled with mere human opinion, and showing at every point the stamp of human workmanship, that an unprejudiced judgment is almost an impossible thing to attain. In the fourth place, the information which the study of natural science imparts, and the housekeeping ability which science laboratories foster, may be of no small value to the individual, and may be of immense value to the race. Finally, the method of scientific procedure is the inductive method, a method

agreeing in every particular with the most approved psychological position, and attested by the remarkable effect of natural science on the character of school texts as a whole.

The earlier campaigns of the struggle between the classics and the natural sciences were waged by enthusiastic and well-meaning reformers; men possessing, perhaps, more zeal than knowledge. Later, the struggle was continued by men of a broad and scientific spirit, such men as Herbert Spencer and Thomas Huxley.

It may be well at this point to mention a few of the points emphasized by those who would like to see the classics retained on the courses of study of our secondary and higher schools. Much has been said and written within the last quarter of a century for and against the value of the study of the classical languages and literatures. Some there are who see in the humanistic school only a ruin standing in the midst of the many palaces of modern culture. There are those so infatuated with the material and the commercial that they decry the classical studies as useless because they do not teach students how best to utilize, *e.g.*, the coalfields of Western Canada. Surely these are extreme views. "Is not the life more than meat, and the body than raiment"? Surely history has shown that any nation aiming only at industrial and commercial expansion, and thereby neglecting the higher ideals of mankind, may flourish

for a time, but in the end contribute but little to real civilization. Granting then that the classical studies possess a real and substantial place in general culture, what specific points are usually brought forward by the devotees of the classics? In the first place the classics are not living languages to be learned without reflection and without effort. If properly learned the classics must be learned by system, rule and formula, a process requiring patience, developing concentration of mind and contributing in the end to clear thinking and to accurate reasoning. In the next place it is through a study of the literatures of Greece and Rome that a first-hand knowledge of all the great masterpieces of antiquity is acquired. To cut off this field would be to cut off many centuries of the world's experience. In the third place the classics provide the elements by means of which the aesthetic sense is gradually developed and taste acquired. In the fourth place a study of the classics is important to a scholarly understanding of the English language. Finally, the classical studies possess a moral or ethical element in the many examples of natural virtues presented; from that of chaste Penelope to that of Socrates dying in obedience to what he considered to be the voice of God.

Herbert Spencer (1820-1903). Spencer challenges the course of studies as he found it in operation in the schools of England. He then proceeds to lay down the principles by means of which a more rational course

may be formulated. In general he adopts the basis of Rousseau and demands, not a "return to nature," but a "return to science."

Spencer's educational theories are to be found in his book entitled "Education." In this book Spencer discusses four topics—What knowledge is of most worth? Intellectual education; Moral education; and Physical education. In his essay on "Intellectual education," Spencer practically makes a summary of the main principles agreed to by the great educational writers since the time of Comenius. In "Moral education," Spencer anticipates a great deal from the general application of the *discipline of consequences*, while his chapter on "Physical education" condems the "hardening-process" plan, and prefers free and vigorous play to formal gymnastics. It is, however, in dealing with the first subject—"What knowledge is of most worth?" that Spencer has actually made a valuable contribution to educational literature. Every elementary school teacher needs to consider the relative values of arithmetic, geography, history, reading, etc., if these subjects are going to find their due allowance of time and place on the school time-table.

In discussing the aforesaid question, Spencer, with a mere wave of the hand, sets aside the query—"Is that subject which contributes the most valuable information also the subject affording the best mental discipline?"

Spencer thinks it would be contrary to the beautiful economy of nature were it otherwise. Passing on, Spencer defines *education* as *complete living*, and endeavors to tabulate all the activities which subserve this. For complete living, we must know *in what way to care for the body; in what way to care for the mind; in what way to manage our affairs; in what way to bring up a family; in what way to behave as a citizen;* and lastly, *in what way to utilize the sources of happiness which nature supplies.*

"There are a number of sciences," says Spencer, "which would throw some light on these subjects, and it should be the business of education to impart these." An unqualified answer to the question here propounded can scarcely provide a satisfactory course of study, for we are bound at once to ask, to whom? for what purpose? under what conditions? How can small children understand the sciences? Science work is not for them. How would Spencer treat the body? Physiology is suggested. Would a knowledge of this science, were it possible for children to acquire it, lead them to act when the occasion arose. Children should, doubtless, know something of the laws of health, but surely not by having them study physiology.

How would Spencer have us care for the mind? This has already been answered in what we have said on Intellectual Education. In summary it is this: The

mind is an organism. An organism is governed by laws. Discover these laws and educate accordingly.

Next in importance comes the knowledge of aiding in direct preservation of self by assisting in the gaining of a livelihood. As such sciences as mathematics, physics and biology underlie all the practical arts and business of life, these must be known. Does this mean that the teacher should decide for each child what his particular money-making line should be, and instruct him upon this favorite line? Surely every teacher should know the capabilities of the child and develop these, but to train a boy for a special calling in life! Better follow the opinion of dear old Pestalozzi and place such a thing as of secondary consideration. Better send a child from school with a love of knowledge and a mind well disciplined to acquire more knowledge. This will in all probability be the best asset that the schools can give.

Mr. Spencer would also have teachers instruct children in the matter of rearing children. A very necessary thing, no doubt, but how can such knowledge be imparted to young children? It would seem that this is a matter for parents and parents alone to consider.

What about the knowledge which fits a man to discharge his duties as a citizen? Spencer thinks naturally of history, but a history consisting of the reading of the fifteen decisive battles of history, would this be of any value? Spencer thinks not, but is

Spencer right? Should not a proper study of history widen one's mental vision and help to make him truly patriotic?

What has Spencer to say of human enjoyment, of art and literature, the "sources of happiness which nature supplies"? These he would place in the leisure hours of school and also in the leisure hours of life. If this were done, how many persons, a generation or two hence, would be able even to play the simplest selection on the piano? If Spencer means that these may be taught when the serious things of life have been attended to, it will mean that they can be no longer studied, for the programme of serious things will occupy the whole of life. If knowledge be estimated by its influence on action, we shall probably rank "mere accomplishments" much higher in our schemes of education than they have hitherto been placed.

After establishing to his own satisfaction the pre-eminence of science as a means of preparation for the several activities mentioned, Spencer next proceeds to show that better than language, science trains the memory, the judgment and the reasoning. Moreover, it is not behindhand in affording a very excellent training in even morals and religion.

As a special plea for a department of knowledge just entering upon a highly developed state, and largely neglected by the school, Spencer's work on education

was most important. As a sufficient guide to the selection of subject-matter for schools it is not at all satisfactory, for it has neglected and undervalued the institutional side of modern life, and it has failed to discriminate between the individual and the professional need of science. We surely need bridges, but should all be bridge experts?

On the first reading of Spencer's famous chapter, one is apt to be carried away by the apparent philosophical soundness of its analysis, the convincing force of its arguments and the seeming plausibility of its conclusions. The critical reader, on second reading, is sure to find something wanting and this something is seen in Spencer's imperfect view of what constitutes complete living, and also in his use of a vague middle term, presenting thus a half-truth as if it were a whole truth, and leading thereby to error. That Spencer exerted a profound influence on science teaching is evidenced by the fine physical and chemical laboratories of our high and technical schools.

The views of Huxley (1825-1895), on the purpose of education are contained in the following remarkable statement of the product of a liberal education.

"That man, I think, has had a liberal education who has been so trained in youth that his body is the ready servant of his will, and does with ease and pleasure all the work that, as a mechanism it is capable of; whose

intellect is a clear, cold logic engine, with all its parts of equal strength, and in smooth working order, ready, like a steam engine, to be turned to any kind of work, and spin the gossamers as well as forge the anchors of the mind; whose mind is stored with a knowledge of the great and fundamental truths of nature, and of the laws of her operations; one, who, no stunted ascetic, is full of life and fire, but whose passions are trained to come to heel by a vigorous will, the servant of a tender conscience, who has learned to love all beauty, whether of nature or of art, to hate all vileness and to respect others as himself. Such an one, and no other, I conceive has had a liberal education; for he is, as completely as a man can be, in harmony with nature."

QUESTIONS.

1. State the line of argument used by Spencer in the discussion of—"What Knowledge is of Most Worth?"

2. To what extent is Spencer's argument concerning the value of scientific studies valid?

3. Mention other conceptions of culture and compare them with that given by Huxley.

4. What is the educational value of Physics or of Botany?

5. State your position regarding the doctrine of *formal discipline.*

INDUSTRIAL EDUCATION.

(AN EDUCATION FOR VOCATION.)

Should the modern public school train for vocations? Does the modern school give an adequate training to the boys and girls? Much of the criticism of the school has had its foundation in a consideration of these two questions. Much interest has been taken in the general subject of industrial education by two different classes of people. The wage-earner and the manufacturer, on the one hand, have a particular interest in industrial education, for skilled workmen and industrial intelligence are factors in the processes of manufacturing and construction work. The interest of the student of social science, on the other hand, may be considered as general and theoretical in comparison to that already mentioned. Students of education, however, are coming more and more to feel that education is something far greater than mere *schooling*, and that the fullest development of the individual child must always take into account the fact that every child must live a social life. It is absolutely necessary, therefore, that children should become familiar with all the activities of the community; should learn to give as well as receive, produce as well as consume, and do as well as learn. There seems to be a growing suspicion that the existing public school system does not meet all the demands of modern industrial and social conditions.

There is a feeling that the schools are too literary in their spirit, scope and methods. People at any rate are inquiring whether some changes more favorable to modern needs may not be devised whereby the schools may reach the great body of children and youth in a more practical way. Such a modification of existing courses, it is thought, should stop the tremendous exodus of boys and girls before the high school stage has been reached. Now industrial and technical education have no place apart from the general school system out of which they must grow, and of which they must form an integral part. The purpose of the school is to fit boys and girls for intelligent citizenship and indirectly to prepare them for taking a successful place in the vocations beyond the school days. It must be remembered, however, that the day of regular apprenticeship has gone by. At one time the lawyer and the doctor studied their professions in the offices of older practitioners. Farming was learned by working on the farm, housekeeping, by service in the home. Modern science, with its marvellous advancement, has gradually displaced this system of apprenticeship and has forced the work of learning a vocation upon special training schools, notably, schools where theology, law and medicine may be acquired.

Again, life has become much more complex in the larger cities and towns. Great flats have set aside the

homes where single families were sheltered. Many people have become wealthy, and various circumstances have combined to deprive children of those opportunities for industrial activity which formerly belonged to every home. People now complain that children have nothing to do; that children nowadays receive but do not give. Food, clothing and shelter come to children as freely as the sunshine and the air, and as a consequence, their view of life is narrow and their attitude toward labor often wrong. Not having any share in productive labor, and out of sympathy with it, boys and girls have now no standards by which to measure time, amusements, possessions, etc., a state of affairs of very grave social concern.

A few years ago an attempt was made to recover some of the ground lost, and commercial courses were added to the existing courses of the high school. In permitting this innovation the whole question bearing on the right of the community to furnish special training for the vocations was practically acknowledged. Later courses in drawing and manual training were also added with the view of broadening still further the literary character of the schools. The results, however, in these lines, have not been entirely favorable. Drawing has become more and more cultural in its purpose and methods, and the original industrial purpose of this subject has been largely lost sight of. A similar result

has attended the introduction of manual training courses in some of the high schools.

All the callings in life for which children and youth need to be specially trained for may be considered as falling into four classes, namely, professional, commercial, productive and domestic. The professional and commercial classes, the occupations permitting of good clothes and clean hands, are already fairly well provided for. Coming to the occupations engaged in production as distinguished from those of distribution, we find that these in their most advanced and scientific stages are also provided for. No instruction, however, is furnished at the public expense in the occupations of farming, dressmaking, market-gardening, printing, etc. Agriculture, it is true, is recognized by the state in its aid to agricultural schools, but there has been no very serious effort up to the present time to prepare for them by placing suitable courses in our elementary and high schools. Book agriculture has been tried, but book agriculture defeats the purpose for which it was intended. Efforts of a private or philanthropic character in the establishment of evening classes for arts and crafts serve only to show how great a need there is of adequate training schools for the ordinary vocations.

Many children leave the elementary school at the end of grade five. A very small percentage of the pupils enrolled ever reach the high school stage. What

becomes of the child who is no longer interested in school life, or who feels the stress of necessity for self-support, and is compelled to leave the school at an early age? What provision is made for his apprenticeship? No schools offer a practical training to boys below the sixteenth year. The doors of the great industries, where an opportunity for picking up a trade might be provided, are not open to him. The result is that he will drift into some unskilled industry, or into an industry undesirable to his taste. So far as the actual productive value of the child is concerned, and so far as increasing his industrial and productive efficiency is also considered the years between the fourteenth and the eighteenth are practically wasted years. The employments upon which such children enter are not employments which demand intelligence and manual skill; such employments, therefore, are not educative in any sense. Children leaving school at a later period, and especially those who have completed a high school course, are more in demand, and moreover, are able to enter upon employments of a much higher grade. At the same time even these are wanting in manual skill and in industrial intelligence.

Industries recruited from such sources can not compete with industries manned by operators technically trained. In the long run that industry which combines with general intelligence the broadest technical know-

ledge and the highest technical skill will command the markets of the world.

It would thus seem that every community has a right to demand the fullest results of the labor of all its operators. It would also appear that the individual has a perfect right to be so placed that advantage may be taken of all the institutions providing a training for his special vocation in life. How may these be effected? There seem to be two lines along which industrial education may be advanced. First, through existing public school systems; and secondly, through independent industrial and technical schools. What may be expected of the former? Elementary school work in cities and towns, in other words, schools in great industrial centres may be so modified as to include instruction and practice in the elements of productive industry. This would mean some modification of existing courses above, say grade six. Again, the work of the high school may be so arranged that the instruction in science, mathematics, drawing, etc., shall show the application and use of these subjects in industrial life. High schools may furthermore provide industrial courses and furnish instruction along the lines of the principles of agriculture, domestic science, and the mechanical arts. What results should follow the institution of such courses? All the results are not at present in evidence, for many still lie in the "lap of

time." This much, however, may be said. Such courses should aid very materially in detaining boys and girls in the schools. Such courses should eventually produce young men and women of good judgment, men and women in sympathy with productive labor, and men and women whose value should be ultimately in evidence in the increasing industrial output of the community. Such courses, finally, should tend to leaven the older courses and help to connect these courses more intimately with the life outside of the school.

QUESTIONS.

1. Should the schools train for vocations? Give reasons for and against.

2. What do you conceive to be the positions taken by Rousseau, Pestalozzi and Froebel on lines similar to that of industrial training?

3. What are the purposes of manual training and of book-keeping in the schools?

*MORAL TRAINING IN THE MODERN SCHOOLS.

*Lately there has arisen persistent, even urgent demands that more attention be given moral education in all the schools, from the elementary school to the university. It is evident that this demand has something behind it, and that it is but the forerunner of a storm of protest against the absence of a *regular* instruction in this the most important of all subjects. It is, perhaps, time that those responsible for the courses of study should appreciate the fact that moral training is a most vital problem before the schools of the present century. If we would have individuals possessing a noble character we must give instruction to the intellect by showing what is right. We must awaken the feelings that there may be a disposition to do the right. Through the feelings the will must be reached so that there may be that response that will lead to right action. What we would have in the man we must first have in the child, and what we would have in the nation we must first have in the schools which should be preparing boys and girls for active life. The moral influence of the school must be made a conscious rather than an incidental matter. System and method are as desirable here as in intellectual practice. Clear ideas of honesty

*A digest of Moral Training in the School. A comparative study by George Edmund Myers, in the Pedagogical Seminary. Vol. XIII, No. 4, Dec., 1906.

and honor are as appropriate for school lessons as are interest, spelling, or any other subject of the school programme. The home is not relieved of responsibility, but, having contributed to the support of the schools, and having delegated the necessary authority, the home has the right to expect that, by this division of labor, the work will be better performed by those specially fitted than if such work were attempted by the home.

When so important a question as moral training is being considered by those most deeply interested in the future welfare of our common country, it may not be out of place to study the school systems of England, the United States, Germany and France, for the purpose of seeing how far each is contributing to moral training.

ENGLAND.—Taking the English school-system of the twentieth century, we find two types of Elementary Schools, known as the *provided* and the *non-provided* schools. *Board*, or provided schools were established in 1870, and were supported by local taxes and special grants. *Voluntary*, or non-provided schools were founded by religious denominations, or by the British and Foreign School Society, and were supported by denominational funds and by government grants. Since the law of 1903 these schools have been supported similar to the provided schools. The religious instruction of the provided schools is undenominational, while that of the other schools is denominational.

About twenty-five per cent. of the elementary school teachers have had a two years' training course ; a course, however, more academic than professional. Twelve per cent. have been admitted to the profession without any special training. About twenty per cent. belong to the *pupil teacher's* class ; teaching-apprentices, in other words, engaged by the board on condition of teaching under the supervision of the headmaster, and of receiving suitable instruction during their engagement. Separation of the sexes is common in English elementary schools. Feminine influence is becoming predominant, and feminine moral qualities are being emphasized rather than masculine moral qualities. Games and plays occupy a very prominent place in the lives of English school children, and teachers are generally in sympathy and frequently take part with the pupils in these games and plays.

Militarism and extreme centralization in educational management are absent, and the headmaster of the English school enjoys a great deal of freedom and initiative in the organization of his school and in the arrangement of his programme. The government requires that certain subjects be taught, but the government does not specify how extensively or in what manner those shall be taught. A list of optional subjects is also provided, and the master may select those of value to the school. In this way local needs

are provided for and respect is shown the master's individuality and responsibility. A school atmosphere is thus created which stimulates a like feeling of responsibility and initiative in the children. Punishments are sometimes severe, but order and obedience are never of a military character.

Little importance seems to be attached by some inspectors to reading lessons as forces for moral training. Other inspectors mention that the teachers are striving to direct the reading of the pupils along right lines. Most of the reports deal with enunciation, fluency, etc., with little regard to the moral possibilities of the reading lessons. Pupils are also required to memorize many literary selections and to give them as recitations. Several inspectors complain that these selections are given with no eye to their literary value. Nothing is said of their moral value, which may, neverthless, be considerable.

The Act of 1870, establishing a system of elementary education in England, made important provisions concerning religious instruction. It is, therefore, almost a universal custom to open school with a hymn and a prayer, either the Lord's prayer or one or more of the short prayers from the book of common prayer. This was followed by a Scripture lesson which occupied about half-an-hour. Teachers were instructed to make this lesson as *practical* as possible. Examinations were

held at regular intervals and reviews were frequent. The religious syllabus placed special emphasis on the moral teachings of the Bible and was arranged with due regard for the age of the children. Regarding the manner in which the Scripture lessons are taught it may be said that a reverent spirit is almost always present and that the lessons, are, on the whole, taught with as great care and thoroughness as any other lessons. It has been said that "no one who knows the schools can well doubt that religious and moral teaching of a very valuable kind is imparted in the schools, and that the influence of this instruction on the conduct and character of the children, and on the religious life of the nation, has been profoundly felt."

Perhaps no one feature of English *public school* life, the school life of the great English public schools of Harrow, Eton, etc., has contributed more to moral training than the school games. No other schools have so fully recognized the culture value of games. Outdoor sports are graded and are made a regular part of the curriculum. Boys are excused from them only upon medical advice, and the masters not only oversee them but participate in them. Besides their physical effects which are no doubt great, there are other less obvious effects, but perhaps these are more important in the end. Some of these effects are promptness of action and prompt decision; prompt command on the part of

the captain and prompt obedience on the part of the team These games teach self-restraint, control of temper, a sense of honor, the habits of co-operation and straight-forwardness, and they teach all of these in the line of the boys' own natural tastes and activities. The classical influence of these secondary schools is certainly largely offset by that of the "playing field." Still there are those who see too much athleticism in the English public schools, and who complain that "this absolute devotion to sports to the exclusion of almost all other interests is one of the weakest points of the English educational system."

Still another feature of the public school which is important for moral training is the intimate relations of master and boys. The master is with the boys in their games and in their tramps. He lives in the same house with them; dines at the same table and shares in their daily experiences. This greatly intensifies the influence of the master's personality, and contributes greatly to the cultivation of that school loyalty which is so marked a feature of the great English public schools.

In the matter of discipline, the "public opinion," of the school is largely a public spirit emanating from the boys of the highest form. These boys are expected to show the highest example in industry, good conduct and public spirit. They are also responsible for the conduct at meals, in the halls, the [illegible], and the

dormitories. The lack of professional training on the part of English public school teachers, however, has an important bearing on their efficiency in moral training and also in intellectual training. The notion that all that is needed in order to become a secondary school teacher is an adequate knowledge of the secondary school subjects is a notion that works evil wherever it is found.

Again, the examination system has reached its limit in the English public schools and the usual accompaniment of cramming for examinations of all descriptions is too frequently present and is even encouraged.

Another feature having a significent bearing on moral training is the class character of the English public schools. These are not schools for the children of the poor, and the result of educating boys under these conditions is likely to breed a spirit of contempt for the great mass not so well circumstanced. Close competition between classes and not co-operation lies at the root of English life, an evil the public school system of England tends to perpetuate rather than to discourage.

Finally, it must not be forgotten that the English public schools are for boys and boys alone. Only at vacation periods are the boys permitted to enjoy the refining atmosphere of the home and the mother's and sisters' society. Such exclusion tends to emphasize the masculine qualities of *personal courage*, *sense of honor*,

hardiness, ***self-assertiveness*** to a high degree, while ***sympathy***, ***kindness***, ***self-sacrifice***, the ***higher altruistic*** virtues, are repressed, or at least are not encouraged.

Such are a few of the features of the English elementary and public school systems which are most significant for moral training. A number of forces are recognized. Much emphasis is placed upon the teacher's personality and, on the whole, the schools stand for a cultivation of individuality, self-expression, self-reliance, and initiative. On the other hand it must be acknowledged that the English teacher has but a very meagre professional preparation for his work: that the separation of the classes in school life interferes with the development of the broadest altruism; that the moral discipline attending the school games may be vitiated by undue emphasis, and that the masculine atmosphere of the public schools and the feminine atmosphere of the elementary schools may not afford the best conditions for the moral development of the English boy

THE UNITED STATES.—The public education of the United States is largely a local matter. Several states have made legal provisions regarding moral education in their schools, but these provisions vary from a mere "encourage morality," requirement, to a mandate charging "all teachers, boards of education, etc., with the duty of providing that moral training for the youth which will contribute to securing good behavior and

manners, and furnish the state with exemplary citizens." Several states have passed laws or made judicial decisions concerning Bible readings in the school, and all of the states affect to a slight degree, at all events, the moral training by demanding a certain standard of culture and a suitable character in their teachers. Aside from these very general limitations, each city, town and rural district is a law to itself in the matter of moral training in the schools.

In a few cities, the schoolboard and superintendents provide for an extended, systematic course in moral instruction. In other cities the board calls the attention of the teacher to the importance of making each part of school life contribute to moral training and provides a syllabus on ethics suggesting how this may be done. Boards in other cities leave their superintendents to bring the subject of moral training before the teachers from time to time in teachers' meetings and by circular letter. In still other cities and in nearly all village and rural schools, the matter is entirely in the hands of the individual teacher, and whatever is done in moral training is done through the teacher's initiative.

Consequently, direct moral instruction varies greatly. Nearly all teachers devote the first few minutes of the day to "opening exercises." About seventy-five per cent. use Bible readings, or the Lord's Prayer, or both. Some give short ethical talks or read stories containing

moral lessons. Many have their pupils learn proverbs, precepts, or short selections from literature having a moral bearing. Some take advantage of every opportunity which the regular lesson affords to point a moral. Others give a few earnest words of moral instruction whenever an incident of school life offers a favorable opportunity. In a word, direct moral instruction is nearly always incidental and unsystematic.

The teachers of the schools of the United States, however, rely on *indirect* means for moral training. Among the first of these, we may mention the want of professionally trained teachers. This is the weak point in the school-system of the United States. Indeed, if we take the country as a whole, we shall find that less than one quarter of the city teachers have received an adequate professional training, while in many states where the rural population predominates, less than half have received any education whatever outside of the high school grade. Few high school teachers are professionally trained, and in many instances the so-called normal school course is more a course where teachers are prepared for non-professional than for professional work. Teachers' associations, institutes and summer schools have done much to supplement the work of normal schools. The short professional life of the school teacher in the United States; the fact that some 80,000 teachers, or twenty per cent. of the whole

teaching body, are leaving the profession annually, shows that the schools are largely in the hands of those wanting not only in normal school training but also in common experience.

A second feature bearing upon moral training is the predominance of female teachers. Nearly seventy-five per cent. of the public school teachers of the United States are women. Again, the organization and management of the schools of the United States must be considered in obtaining an estimate of the extent of moral training in the school. In the main, the individual teacher has a considerable amount of independence, and has, therefore, the right sort of atmosphere where initiative and responsibility may be encouraged. In a few cities it is true that nearly everything is prescribed and outlined by the board or by the superintendent, a condition of affairs that can only make a teacher's work lifeless and mechanical. In most rural schools the teacher is his own master, and it may be said that wherever this condition is secured there is usually a favorable environment for the natural de elopment of the moral nature. The relations between teachers and pupils are more cordial than in the schools of any other great nation. The children ask questions freely and are not slow in expressing their opinions. Discipline, too, is more incidental and is based upon the interest attached to the work of the hour.

Again the method of teaching places much responsibility on the pupil, leaves a great deal for him to work out for himself, and thus serves to develop self-reliance and initiative. In this particular these schools are far superior to the English schools, where too much is done by the teacher and too little by the pupil. Even if the method simply substitutes one authority for another, books instead of the teacher, the pupil learns to depend upon his own efforts to find out what these authorities say.

The regular studies, especially reading, history, literature, manual training and nature study, are generally looked upon as having an important bearing on moral training. In the school readers of America the heroes are always possible. The heroes of the American readers have risen from the common ranks and have lived recently enough to be emulated. In the case of other nations, there is a danger of taking heroes of noble blood and placing them too far in the past for school purposes.

The value of games and plays is much less recognized in the United States than it is in England. In cities, school grounds are often far too small, and recess hours too short. Opportunities for spontaneous exercise are thus limited, and little is being done by teachers to improve this. High school students are, however, better circumstanced, and nearly every high school has its

athletic team and inter-collegiate contests. But eve here, principals and teachers are lukewarm, and ar likely to be more interested in the success of the schoo team than in the moral effects of the games. I village and rural schools, school grounds are larg and the children have time enough at noon and a recess hours to engage in group games. Teachers, too encourage games by participating in them, though wit no very great appreciation of the moral value whic such games possess. Again, the schools of the Unite States are not class institutions, but institutions wher the rich and the poor alike mingle. Such schools are therefore, centres where the broadest altruism may b disseminated.

GERMANY.—No provision is made for formal instruc tion in morals in the German schools. There is, howeve in every grade below the university, very definite an very direct instruction in religion. But what are th indirect contributions of these schools to moral training in other words, what are the contributions arising throug the school organization and the school routine? I Germany there is no national school system any mor than there is in the United States. Each German stat has a system of its own, and as Prussia is by far th largest state, and as its school system dominates othe states, what is true of the Prussian school system i likely to be true of the school-systems of Germany as whole.

There are in Prussia two classes of schools, namely, the *people's* schools and the *higher* schools. The former are free and are suited to the needs of the lower classes. Pupils are admitted to these schools at six, and a course covering eight years is supposed to fit for citizenship and for the commoner occupations of life. The courses of studies are prescribed by the state; so also is the preparation required of the teachers. The higher schools charge a fee and are intended for the higher social classes. They receive pupils after these have covered a three years' preparatory course, and they give either a six or a nine years' course of training. This course, if of the *real* type prepares for the technical schools and for a commercial life; if of the *gymnasien* type, for the university and the professions. Some of the higher schools are state schools; others are established by cities and towns; the remainder are private ventures. The courses of study in all are outlined by the state, and are taught by state certificated teachers.

Most of the boys and many of the girls of the German schools never come under the influence of lady teachers, and of those who do many are under their influence but a short time. In the higher schools for girls the teaching force is about equally divided between the sexes, the higher grades being officered by the men. In the higher schools for boys all the teachers are men

The peoples' schools, wherever possible, are organized for boys and girls separately. There are. therefore, schools for boys only, schools for girls only, and mixed schools. Women are permitted to teach in girls' schools, in mixed schools and in the primary classes of the boys' schools. In 1901 about eighty-five per cent. of the Prussian teachers were men. The significance of this situation for moral education is open to debate, but there can be little doubt that the traits of character we designate *masculine* are unduly developed while those traits termed *feminine* are liable to be suppressed. In other words, the predominance of male teachers in the schools of Germany stands for the cultivation of *egoism* rather than *altruism;* of *selfishness* rather than *self-sacrifice.* It emphasizes *law*, *authority*, and *force* as motives of conduct rather than *love*, and the *desire to please* the one in authority. It stimulates *independence* and *initiative* rather than their opposites.

Militarism, a marked feature of German character, exercises a profound influence on the schools. The whole system is pervaded by the military spirit from the bottom to the top. Many of the teachers are reserve officers; most of the pupils hope to be; and all know that service in the army awaits them at the end of their school days. In the higher schools this influence is especially marked and it has been said that "boys go to the higher schools, not to be educated, but to secure

military privileges." The military training of the German teachers gives them a military attitude toward the work of the schoolroom; and the home, on account of the fact that the fathers have served two years in the army, is in sympathy with this military attitude.

Under these influences a precise military air pervades the entire school system and an exacting military discipline prevails. Prompt, unquestioning obedience is demanded. Strict attention to the task is expected. Such an atmosphere cultivates respect for authority; magnifies the teacher's office and intensifies his official influence. On the other hand, teachers have not much sympathy with the weaknesses of child life. Perfection of organization rather than individual differences is emphasized. Moral independence and initiative are repressed rather than encouraged; and amiable relations between teachers and pupils, relations which often have great moral value for the pupil, are looked upon as unworthy of schools presided over by men.

Again, German teachers receive a most thorough professional training. Indeed, these teachers are said to be the "best trained teachers in the world." The German teacher's knowledge of the history and the philosophy of education is extensive and sound. In no country in the world is teaching on so sound and so philosophical a basis as it is in Germany. Teaching there is not a makeshift, but a profession. The German

teacher prepares for his profession, and enters upon it as his life work, and the state sees to it that this preparation is long enough and thorough enough. If one would teach in the German higher schools, he must first complete one of the nine-year higher school courses. Next, he would spend at least three years in university study, largely special work. If successful in his final university examination, he would then enter upon a two year's pedagogical course, one year of which was theoretical and one year practice work. This completed, he would be ready for appointment to a regular position in a higher school, which appointment may come after having waited his turn for half-a-dozen long years, spent usually in substitute work or in tutoring. The teachers of the people's schools are required to have had six years of training, three of which is distinctly professional and the remainder special academic work related to the course which they are preparing themselves to teach. All this means that German higher schools give a more rigorous and exact intellectual training than any other schools in the world. It also means that German teachers, as a body, make fewer mistakes in *management*, *discipline* and *teaching*, according to German pedagogical ideals and methods.

Again, the German teacher *instructs* his pupils. There are no alternate periods of seat-work and recitation in the German schools. The. is home-

work in certain subjects. More in the higher than in the people's schools, but this work is looked more in the light of *fixing* previous instruction than as a preparation for a recitation yet to come. This emphasizes the office of the teacher, and so bears upon moral training. It brings the pupil more into contact with the teacher and less into contact with the text-book, and thus makes him more dependent upon the teacher than upon the book, and less dependent too, upon his own efforts. It tends to weaken the pupils' self-reliance and initiative, moral as well as intellectual, or at least, to leave these undeveloped.

Games and plays in the German schools occupy an extremely small place. The playgrounds are small, and the games played of no sort to induce generous perspiration. The fact is, there is no time for sports as we know them, and indoors the same criticism may be safely made. In the light of what is now known regarding the educative value of play, there can be little doubt that this lack of play in the German schools is a fact of very great significance. It is a failure to use one of the most powerful forces for the cultivation of elemental, social and personal virtues. School games, if properly played, stimulate respect for the rights of others, and co-operation and loyalty to the social group. Again, they may be used to develop courage, self-reliance, self-control, individual initiative and honesty,

and it is the misfortune of Germany that she is only beginning to recognize the value of outdoor games and to introduce them into her schools.

In Germany a sympathy with religious instruction has existed for centuries, first as a church institution and afterward, when the government assumed the responsibility of education in state and in city schools. In fact, German people have come to look upon religious instruction as a matter of course.

In the Prussian higher schools the aim of this instruction is to develop Christian leadership. In the people's schools the aim is Christian citizenship. In both, faith and dogma are more emphasized than conduct, and the religious rather than the ethical elements of Christianity are kept in the foreground, though the ethical are not omitted.

In the people's schools thirteen per cent. of the total school time is devoted to religious instruction, which is given by the regular teacher who has had special training for it in his three years' course in professional training. The most emphatic feature of the instruction is Bible study. For the first two years this is given in the form of stories narrated by the teacher; then selected stories written in simple language are read by the children, and, finally, during the last four or five years, the entire Bible, or an expurgated edition of it is read in the class. Many hymns are committed to

memory; simple prayers are learned and used in the opening and closing exercises of the school; the church calendar is studied and church history, particularly the period of the Reformation, is more or less thoroughly grasped.

In the higher schools all pupils are required to study religion three hours per week the first year, and two hours per week each of the remaining eight years. In general culture the course of study used in the Prussian higher schools does not differ materially from that required in the people's schools. It is, however, much more comprehensive in character and includes advanced work in church history and in dogma.

While there may be much in this course of study possessing little value for moral training, on the other hand, the course is rich in ethical content. It brings before the pupil the moral teachings of the entire Bible —the stern commands of the decalogue, the fervid exhortations and denunciations of the prophets, and the sublime moral principles of the Christ. It includes also numerous examples of moral heroism and moral cowardice, and frequent illustrations of rewarded virtue and punished wrong. Again, it brings under tribute the ethical content of church history, the significance of which is seen in the striking examples of such moral heroes as the German Luther, etc.

Moreover, much of the religious teaching which this course affords is tremendously important for the moral life. Christianity is essentially an ethical religion. The belief that God knows the thoughts and motives of the human heart, and that He will punish vice and reward virtue are powerful factors in determining human character and conduct. As far as its content is concerned a course of study could hardly be conceived which would promise more for moral training.

But the value of a course of study is not determined wholly by its content. Something comes out of the relation of this to the life of him who pursues it, and upon the manner of presenting it. There are many indications that this course in religious instruction is not closely related to the lives of the German pupils. Many of the clergy complain that there is a lack of vitality; that the teaching fails to reach life, and without seeing the real cause of failure, these clergy are urging that more time be given, a remedy used only too frequently by those who do not understand the situation.

Again, it can not be said that teachers, one and all, present the religious instruction effectively. Some treat it as an intellectual subject like arithmetic. Another class of teachers present it in an extremely devotional manner. Other teachers combine both treatments. Still other teachers are out of sympathy with religious truth and disbelieve much that they are asked to teach.

On the other hand, many of the teachers, particularly those of the people's schools where the religious life and the religious ideals are more akin to those of the past, are in sympathy with the course of religious study and possess the necessary sense of responsibility for the moral and spiritual welfare of their pupils to make their religious teaching vital. Whatever may be said in criticism of the moral influence of the German schools, they stand pre-eminently for the inculcation of *obedience* and *reverence*.

FRANCE.—Coming finally to a consideration of the schools of France, we find that the great majority of French school children are taught by teachers of their own sex, and that they associate in school with pupils of their own sex. At six the primary school is entered and a separation of the sexes begun. Every village with a population of over five hundred must have a primary school for boys and another for girls. In smaller districts both sexes may attend the same school. In the higher, or so-called secondary schools, the boys and the girls are separate. The boys' schools are taught by men; the girls' schools by women and the mixed schools also by women.

Militarism exercises a strong influence over school life in France. The entire school system is centralized, officered and controlled like a great army with the minister of education as commander-in-chief, and every

school teacher a subordinate officer whose chief business is to carry into effect the orders of his superiors. Such a condition makes school discipline military in character; crushes out originality in teacher and in pupil alike; forbids development of moral self-hood; and subordinates the interests of the individual child to the perfect working of the educational machine. To boast that he knew what was being done in every school in France at any particular school hour, was a boast that no minister of education should take pride in making, for it illustrated a condition of affairs where independence of action was not permitted.

Again, an almost entire absence of games and plays from French schools must have a serious bearing on the growth of the moral habit. French teachers are not so thoroughly trained as are the teachers of Germany. Nearly all the primary teachers have had a three years' normal course, but this course is largely academic and is not based on any extensive scholarship as it is in Germany. Teachers in the secondary schools are practically untrained, a condition liable to produce pedagogical blundering of moral significance.

The walls of French schools are adorned with patriotic mottoes and moral maxims, all of which may exercise an unconscious influence in favor of patriotism and morality. There is also posted in each schoolroom a copy of the law prohibiting corporal punishment, the

punishments which the teacher may inflict being limited to "bad marks, reprimands, etc." One may be excused for concluding that the influence of the maxims and the mottoes may be more than offset by such a notice.

Competition and rivalry are encouraged by the giving of medals and prizes, and self-emulation is stimulated by having each pupil place samples of his best work in an exercise book which is taken from grade to grade and which is often employed for the sake of testing the pupil's progress.

France has made a more serious conscious effort than any other great nation to develop character through her schools, and the means chosen has been direct moral instruction on a secular basis. In 1882, a law was passed making moral instruction compulsory in all the public elementary schools, and within a few months this instruction was as truly a part of the regular work as reading or arithmetic.

A large majority of primary teachers have received a normal school training. As this training includes two hours per week in morals, psychology and pedagogy, the teacher is provided with elaborate instructions and suggestions concerning the task of moral instruction.

In the elementary programme, that is the programme for children from 7 to 9 years of age, the teacher is to engage in familiar conversations with the pupils and to read to them moral examples, parables, precepts and

fables. Teachers are also to direct practical exercises tending to put morality into action in the class itself. The programme for the intermediate grades, that is for children from 9 to 11 years of age, is more definite and treats of—the child in the family, the child at school, our country, self-duties, duties towards others, and duties toward God. Finally, the programme for pupils from 11 to 13 years of age may be described as a more comprehensive treatment of family, social and national duties.

In criticizing these programmes, it may be said that the gentlemen who arranged them must have been thinking more of moral citizens than they were of moral children. There is a want of harmony between the most fundamental part of the course, the part dealing with the duties to self, and the organization and management of the French primary schools. The programme is adapted to a democracy, while the organization is better suited to an absolute monarchy.

How are the programmes used by the teachers? How are the many text-books on morals handled? Is the teaching perfunctory and mechanical, or is it vital and stimulating. Judging from the evidence bearing on these questions we have reason to conclude that the course has not been a success: that the methods usually employed are most wooden and are not touched in any real way by the teacher's personality. It is, however, im-

possible to determine and difficult to estimate the full result of such a course in moral instruction, and France must be given due credit for having made a beginning in moral training in the face of very great obstacles.

SUMMARY.—Having now reviewed the principal forces making for character in the school systems of four great nations, what seems to be the great outstanding truth resulting from this review? Is it not this—*the personality of the teacher is the ultimate source of power in the school?* It is customary for us to attach certain emphasis to the moral value of history, literature, etc., and there can be no question that all these are rich in moral culture material. Their significance for character depends, however, in the main, upon the teacher. It is sometimes said that the public opinion of the pupils has far more influence upon character than anything the teacher may do or say. But should not this public opinion be in a very great measure, the teacher's opinion, the expression of the teacher's personality crystallized in the minds of the pupils? It has likewise been said that the child should literally breathe in a moral atmosphere at home and in school if the best character is to be attained. The character of the management will determine the atmosphere in which the child's life is to unfold. When a school is properly organized, the emotions and the will are as carefully exercised

as the intellect. There are not two kinds of schoo management—one to secure instruction and the othe to furnish adequate moral training. All things don right are in fundamental harmony and the best in struction provides the best means of ethical training In the pupil's little school world he is trained, or should be trained to the forms and habits of life which fit him for the larger social life in which he must some time participate. Human personality is a growth. It cannot unfold as it should in an atmosphere not suited to its development. Neither can it be manufactured. The moral atmosphere of the school is its routine and its discipline permeated by the teacher's personality.

This comparison also emphasizes the immense number of means available for moral training. The advocates of a particular means, such as direct moral instruction, usually overlook or under estimate the many other forces making for character. Judging by the experience of France, the French must have expected from moral training a whole panacea for the moral ills of France. But the difference in children makes many ways of approach necessary and demands that all these be kept open.

In the lower grades, stories and fables, and in the higher, history and literature furnish rich stores for the cultivation of the moral judgment and for fostering high ideals. But the teacher must usually allow the lesson to

point its own moral. Among other school subjects, manual training, nature study and school gardens, all contribute to the development of moral character. Nature study, if genuine, is essentially a *doing*, and this is the basis of its value as a moral agent. The same may be said of manual training and of school gardening. Enough has been said regarding the moral worth of games and plays. Discipline and management are also immensely rich as forces in character-building. A badly organized school is, therefore, an educational crime. Self-emulation, encouraged by a comparison of the pupil's work from month to month with the same pupil's work of an earlier date, may supersede much of the vicious competition promoted by examinations and prizes. The routine of a well-managed school cultivates habits of punctuality, regularity, and system, features of character often too little recognized.

The school, in consequence of the changed character of the home, has been obliged to concern itself more and more with the health, the nourishment, the environment and the activities of the pupils during the many hours of the day when it does not have direct supervision over them. This is done usually by two methods. Mothers' meetings are held in the schools of many cities for the purpose of bringing home and school into mutual sympathy. Again, wherever the school is a living institution activities are around which possess

such inherent force that they must work themselves ou in the child's leisure and recreation. But only such a appeal strongly to the pupil and connect themselve readily with the home interests can ever acquire th momentum. Nature work, school and home gardenin and manual training all possess this quality. Teacher may also influence the home-reading of their pupils, an this is a feature that is becoming more and more factor in the school work of teachers.

Finally, our comparison forces upon us the conclusio that special preparation of teachers for this work o moral training is the first requisite of increased efficiency When all has been said and done the fact remains tha the moral training of the modern school is haphazard unsystematic and unscientific. Part of it is directed i an obscure sort of way by the teachers whose method are chiefly the result of accident; the greater part is lef to chance. And yet we all agree that the fundamenta aim of education is *character*.

Now general professional training, and such specia training as is given in the German, French and Englis schools is insufficient. Adequate training should be given in every normal school. Moral training should be treated as a separate subject and should be given by an expert. Such work should really become the very heart of the professional training of our teachers.

Finally, the school must not merely represent the ideals of the community: it must go farther and take higher ground when necessary, and make clear and definite those points which are not clearly defined in the community. If the best ideals are selected and properly emphasized, they will remain as permanent and powerful factors in all after life.

QUESTIONS.

1. What *direct* and what *indirect* forces bear on moral education in *a*, England; *b*, the United States; *c*, in Germany; and *d*, in France?

2. Make a summary of the forces which should count for effectual moral training in the Canadian schools.

3. If we had more of that kind of training which would equip children for industrial efficiency through the more direct teaching of trades or the furnishing of some kind of a commercial training, it would make of the children surer bread-winners, and reduce the temptations to crime. Discuss this.